

was observed through surveillance during the specified period, as applicable. These counts presented are conservative because the only available dates of contract sales in the hearing record occur in June of 2014 and June, August, and September of 2015. Surveillance data in the hearing record are available only from July 12 through August 27, 2015. For this period, only surveillance data were used to count the days of diversion (i.e., invoice sales, contract sales, and surveillance data were not combined).

- ^d Data Source: PT-66, pp. 26–108. Only invoice sales data were used to calculate the volume of water diversions due to only a portion of the month falling within the specified period and the lack of daily contract sales data in the hearing record for these months. Because daily contract sales data were unavailable, the volume of diversion presented in this table is highly conservative. To calculate the volume, the number of gallons Fahey invoiced each vendor over the period (number of loads * gallons/load) was summed across all vendors and converted to acre-feet.
- ^e Data Source: PT-67, pp. 6–10 and PT-72, pp. 8–31. Invoice and contract sales data reported in Fahey's responses to the September 1, 2015 Informational Order (PT-67) and to the October 30, 2015 subpoena (PT-72) were used to calculate the volume of diversion. The number of gallons sold to each vendor over the period (number of loads * gallons/load) was summed across all vendors and converted to acre-feet. Invoice sales data for June 2014 and June 2015 are available in both PT-66 and PT-72; however, only PT-72 data were used for the June calculations because it represents the most recently submitted data for these months.
- ^f Data Source: PT-56, p. 2; PT-57, p. 2; and the 2015 Progress Report by Permittee for Permits 20784 and 21289, of which the State Water Board takes official notice pursuant to title 23, section 648.2 of the California Code of Regulations and section 452, subdivision (h) of the Evidence Code. The volume of water diversions reported in the Progress Report by Permittee for Permits 20784 and 21289 was used for months for which the entire month fell within the specified period. The volume was calculated by summing the volume of water directly diverted or collected to storage under each permit and converting to acre-feet. The volume includes diversions claimed as developed water for the reasons discussed in section 5.3.2.1 of this order. These reported values are greater than the volume of diversion estimated by the Prosecution Team using surveillance data for the dates for which surveillance data are available (July 12–August 27, 2015). The reported values vary by no more than 0.22 acre-feet for any given month from the total monthly diversion volumes based on the invoice (PT-66, pp. 26–112; PT-67, pp. 6–9) and contract sales (PT-66, pp. 113–114; PT-67, p. 10) data provided by Fahey.
- ^g Although the volume of diversion for the entire month of November 2015 is available in the hearing record (0.17 af), daily diversion information for that month was not available.

5.2.2 Fahey Diverted Water During 2014 and 2015 When It Was Not Available to Serve His Priority of Right

5.2.2.1 Water Availability Analysis Background

During 2014, the forecasted period of water unavailability for post-1914 water rights in the Sacramento and San Joaquin River watershed was May 27 through October 30 and from November 4 through 18. During 2015, the forecasted period of water unavailability for post-1914 water rights in the Sacramento and San Joaquin River watershed was April 23 through November 1. (PT-7, pp. 3–4, ¶¶ 11, 13, 16, 21, 22; PT-30; PT-39; see also R.T., Jan. 25, 2016, p. 54:6–9.)

To determine the availability of water for water rights of varying priorities, the Prosecution Team compared current and projected available water supply with the total diversion demand. (PT-7, p. 2, ¶ 6.) Evaluations used for both the 2014 Notice of Unavailability and 2015 Notice of Unavailability relied on the full natural flows of watersheds calculated by the Department of Water Resources (DWR) for certain watersheds in its Bulletin 120 publication and in subsequent

monthly updates. (PT-7, p. 2, ¶ 7.) “Full natural flow,” or “unimpaired runoff,” “represents the natural water production of a river basin, unaltered by upstream diversions, storage, storage releases, or by export or import of water to or from other watersheds.” (*Ibid.*)

For water demand, the Prosecution Team relied on information supplied by diverters in annual or triennial reports. (PT-7, p. 2, ¶ 8.) The Division’s watershed (basin) supply and demand evaluations forecasted that by May 27, 2014 and April 23, 2015, available supply was insufficient to meet the demands of post-1914 appropriative rights, such as Fahey’s, throughout the San Joaquin River watershed in the respective year. (PT-7, p. 3, ¶ 11.) The Prosecution Team entered into evidence a graphical analysis of the San Joaquin River basin supply/demand for 2014 (see PT-42) and a separate graphical analysis of the San Joaquin River basin supply/demand for 2015 (see PT-43). This order refers to the 2014 and 2015 graphical analyses and the information supporting them collectively as the water availability analysis.

5.2.2.2 There is Sufficient Evidence in the Record to Support a Finding That Fahey Diverted Water During the FAS Period and Non-FAS Period in 2014 and 2015 When It Was Not Available to Serve His Priority of Right

Analyzing and evaluating full natural flow against reported or projected demand is a reasonable method of demonstrating whether there would generally be water available to divert in a particular stream system for a particular priority date, particularly for diversions from headwaters where return flows are unlikely to be present. Therefore, information on full natural flow is sufficient to satisfy the Prosecution Team’s initial burden of production. Fahey may dispute whether this general showing of water unavailability should apply to his specific water rights, for example by challenging the water availability analysis or by asserting an affirmative defense.

The San Joaquin River basin supply/demand graphical analysis for 2014 (PT-42) shows that actual daily full natural flow was less than average monthly pre-1914 demand in the San Joaquin River and its tributaries from May 27, 2014 through at least October 19, 2014, which is the last day for which data are provided in the exhibit. (PT-42; PT-7, p. 3, ¶ 10–11.) Prosecution Team witness Brian Coats testified that “Mr. Fahey’s point of diversion, being a post-1914 water right[], would be above the pre-1914 demand line indicated on Exhibit [PT]-42.” (R.T., Jan. 25, 2016, p. 88:15–17.) The record indicates that the trend shown in the 2014 San Joaquin River basin analysis continued until at least October 31, 2014, when Board staff issued a “Notice of Temporary Lifting of Curtailments for Diversions in the Sacramento-San Joaquin Watershed” for post-1914 water rights in the basin “based on a predicted rain event.” (PT-31.)

Staff again forecasted that water was not available for post-1953 permits and licenses beginning on the morning of November 3, 2014 and continued for all post-1953 permits and licenses until November 19, 2014, when Board staff issued a new notice “based on [the] week’s rain event and associated projected runoff.” (PT-31; PT-37.) This notice remained in effect through the end of the year.

The San Joaquin River basin supply/demand graphical analysis for 2015 (PT-43) shows that actual daily full natural flow was less than average monthly pre-1914 demand in the San Joaquin River basin beginning April 1, 2015 and continuing through April 19, 2015, the last day for which actual daily full natural flow data are provided in the exhibit. (PT-43; but see PT-7, p. 3, ¶ 11 [referencing April 23, 2015]; PT-7, p. 3, ¶ 10.) Although Exhibit PT-43 specifies that full natural flow data are current through April 19, 2015, and although post-April 19 full natural flow data should have been available well before the December 16, 2015 deadline to file case-in-chief exhibits, the Prosecution Team has not submitted such data for the San Joaquin River into evidence. For the period from mid-April 2015 through mid-September 2015, the exhibit presents forecasted full natural flow instead of actual daily full natural flow. (PT-43.) The exhibit (PT-43) predicts that water would continue to be unavailable to satisfy much or all of pre-1914 and riparian demand from mid-April until mid-September. Per the exhibit, satisfying a very junior right, such as Fahey’s, would require an additional 5,000 to 10,000 cfs of full natural flow within the entire San Joaquin River basin between May and July during the dry season. There is no evidence in the record to suggest that such unprecedented dry season inflows occurred. As stated earlier, it was not until November 2, 2015 that, based on forecasted precipitation, Board staff issued a notice of opportunity for diversion for all post-1914 water rights in the San Joaquin River basin. (See PT-44.) The notice remained in effect through the end of the year.

Fahey objects that the water availability analysis’ evaluation of conditions on the entire San Joaquin River basin is too general to support meaningful conclusions about water availability at his particular point of diversion. (E.g., R.T., Jan. 26, 2016, p. 5:17.) In rebuttal, the Prosecution Team introduced specific graphical analyses of Tuolumne River conditions during 2014 and 2015.¹⁴ (PT-153.) Slide 3 of PT-153 shows the boundary of the Tuolumne River watershed. Slides 4 and 5 of PT-153 are graphical analyses of water supply and demand for the Tuolumne River watershed during 2014 and 2015, respectively. Mr. Coats testified that exhibit PT-153

¹⁴ Fahey’s motion to strike this evidence in Exhibit PT-153 and associated testimony was denied by the Hearing Officers. (May 23, 2016 Procedural Ruling, p. 12.)

confirms that there was no Tuolumne River water available for diversion under Fahey's priority of right. (R.T., Jan. 26, 2016, pp. 13:3–7, 14:2–13.)

The Prosecution Team determined supply using DWR's supply information for the Tuolumne River at La Grange Dam, which was obtained from the California Data Exchange Center. (See R.T., Jan. 26, 2016, 13:8-16, 41:12–21.) La Grange Dam is located approximately two miles downstream of NDPR.¹⁵ The Tuolumne demand analysis for 2014 (PT-153, p. 4) depicts the riparian and pre-1914 demands of diverters within the Tuolumne River watershed, which was calculated using the demand reported in 2010 under riparian and pre-1914 claims of right. (R.T., Jan. 26, 2016, 13:10–16.) The analysis demonstrates that by late May even when using a more optimistic forecast, supply would fall below riparian and pre-1914 demand and remain at or below riparian and pre-1914 demand through mid-September, which is the latest period presented on the graph. Therefore, the 2014 Tuolumne River watershed supply and demand analysis follows the same pattern—demand exceeding supply—for the time period presented as the supply and demand analysis for the San Joaquin River basin as a whole. (Compare PT-153, p. 4 to PT-42.)

The Tuolumne demand analysis for 2015 (PT-153, p. 5) depicts the “adjusted senior demand” within the Tuolumne River watershed, which was calculated by refining the demand projections used in 2014 with information reported by diverters in response to the State Water Board's 2015 Informational Order and limiting the demand to diverters with a riparian claim of right or a pre-1914 claim of right with a priority date of 1902 or earlier. (R.T., Jan. 26, 2016, pp. 14:2–4, 14:17 to 15:15; PT-153, pp. 4–5; see also PT-28.) Senior demand for the months of October and November of 2015 was forecasted using 70 percent of the demand projections used in 2014 refined to riparian and pre-1914 appropriative demand for claims with priority dates through 1902. (PT-153, p. 5.) The analysis shows that actual daily full natural flow was less than the adjusted or projected senior demand for almost the entire period for which full natural flow data are provided, i.e., mid-June through mid-October. (*Ibid.*) This is consistent with and supports the prediction of the San Joaquin River basin supply/demand graphical analysis that water would continue to be unavailable to satisfy much or all of pre-1914 and riparian demand from mid-April until mid-September in 2015.

¹⁵ The State Water Board takes official notice of this information, obtained from our eWRIMS database system, pursuant to title 23, section 648.2 of the California Code of Regulations and section 452, subdivision (h) of the Evidence Code.

This is not a case where the diverter accused of unlawful diversion can plausibly argue that the Prosecution Team's analysis was too restrictive when determining unavailability, or that, had less restrictive assumptions been used, the analysis would show that the diverter was entitled to divert. (But see generally Order WR 2016-0015, pp. 11–16.) Fahey's permits are very junior post-1914 rights, with priority dates of 1991 and 2004, respectively, in a watershed subject to FAS for part of the year. Absent an affirmative defense to unlawful diversion, Fahey's rights would normally be among the first obligated to cease diversion during a shortage. Fahey diverts exclusively from springs located at an elevation of approximately 5,300 feet. (See PT-45.) Fahey's diversions are either served entirely by full natural flow, as the Prosecution Team argues, or by some combination of full natural flow and developed water or groundwater, as Fahey argues. Evidence in the record indicates that return flows from upstream diverters are unlikely to be present in Fahey's springs. (E.g., PT-45 [maps]; PT-46, p. 2 [describing Fahey's operation]; PT-49, p. 4 [aerial photos].)

There are numerous downstream post-1914 right holders in the Tuolumne River watershed with water rights senior to Fahey's. (See generally Table 5, *infra*.) For example, MID and TID hold a pre-1914 claim of right at La Grange Dam with a claimed priority date of 1900. Water would be available to serve this claim of right if the water availability analysis accurately predicted a cutoff for water availability everywhere in the San Joaquin River basin for all post-1914 rights in 2014 and all post-1902 rights in 2015. (But see generally Order WR 2016-0015, pp. 14–16). The Prosecution Team does not appear to disagree with this conclusion. (E.g., Prosecution Team's Closing Brief, June 17, 2016, pp. 7:23–24 ["In 2015, the drought was so bad there was no water available for any right junior to 1903 in the watershed."].) If, assuming for the sake of argument that the water availability analysis was too conservative in calculating the priority date at which water ceased to be available for diversion, then there are still numerous downstream post-1914 water rights on the Tuolumne River with priority dates senior to Fahey. License 2425 (Application 006711), alone, allows MID and TID to divert up to 800 cfs from the Tuolumne River from February through November for agricultural use when water is available.¹⁶

The water availability analysis at issue in this case is not reasonably vulnerable to the criticisms raised in Order WR 2016-0015. If no natural flow was available for post-1914 rightholders in

¹⁶ The State Water Board takes official notice of the foregoing information pursuant to title 23, section 648.2 of the California Code of Regulations and section 452, subdivision (h) of the Evidence Code.

2014 or even for some pre-1914 diverters for part of the year in 2015, it is reasonable to conclude that no full natural flow was available for a very junior post-1914 diverter during the same period. Under the circumstances of this case, based on the evidence in this record, the State Water Board finds that the Prosecution Team has met its burden of proof to show that water was not available from at least May 27 through October 30 and November 4 through 18, 2014, and from at least April 23 through at least November 1, 2015. As discussed in section 5.2.1 and shown in Table 2, above, Fahey diverted a total of at least 32.95 acre-feet over 241 days when water was not available to serve his priority of right. Absent a defense, Fahey's diversions were unlawful. The Board considers Fahey's defenses to unlawful diversion below in section 5.3.

5.2.2.3 Fahey-88 and Fahey-89 Are Not to the Contrary

Fahey cites the documents admitted as exhibits Fahey-88 and Fahey-89 to support an argument that "year round diversion is allowed" under his permits.¹⁷ (See Fahey's Closing Brief, June 17, 2016 p. 4:2–3; see generally *id.*, pp. 3:16 to 4:7.) Fahey-89 is an August 2, 1963 memorandum from L.C. Jopson, who was then the Chief Engineer of our predecessor agency, the State Water Rights Board. (Fahey-89, p. 136; see also generally Wat. Code, § 179; Stats. 1967, ch. 284, p. 1441 et seq.) The memorandum provides general instructions for staff when processing unprotested applications to divert water. Fahey contends that one instruction, Scenario D, is relevant to this case. Scenario D of the Jopson Memo directs that:

Where applicant is above a reservoir which has an all year season of collection or diversion and exercises full control of the stream during the critical season; or where a downstream diverter takes the entire flow during the critical season. If applicant can eliminate the protest of the agency controlling or diverting the entire stream, all year diversion is allowed subject to higher level of staff approval.
(Fahey-89, p. 136.)

Fahey-88 is an August 28, 1964 memorandum prepared by an L.D. Johnson, who was then a senior engineer with the State Water Rights Board, regarding Application 21647 to appropriate water from an unnamed stream tributary to the North Fork Tuolumne River. The memo states that, although continuity of flow exists between the proposed point of diversion and the Sacramento-San Joaquin Delta, "approval of the application would not diminish the supply to the Delta during the critical months in years of water shortage" because "[t]he flow of the

¹⁷ It is not a defense to an enforcement action for diverting in a manner not authorized by the permit that the permit should have authorized the diversion. (See Wat. Code, § 1126, subd. (c); *Lynch v. California Coastal Commission* (2017) 3 Cal.5th 470, 476–77.)

Tuolumne River during July, August and September is now almost completely controlled by . . . [Old] Don Pedro Reservoir.” (Fahey-88, pp. 165, 167.) The memo predicts that, with the completion of the then-proposed NDPR, “uncontrolled flows during July, August and September in the Tuolumne River below the reservoir can be expected to be practically nonexistent.” (Fahey-88, p. 167.) The Johnson memo applies Scenario D of the Jopson Memo, Fahey-89, to conclude that approving Application 21647 would be appropriate.

Fahey-88 and Fahey-89 are not precedential decisions or orders of the State Water Board. The Board has held that only decisions or orders adopted by the Board itself, as opposed to decisions or orders issued by staff under delegated authority, are precedential. (Order WR 96-01, p. 17, fn. 11; see also Gov. Code, § 11425.60, subd. (b).) Fahey-88 and Fahey-89 are staff memos, not decisions or orders of the Board itself. Additionally, Fahey-88 and Fahey-89 do not support an argument that unappropriated water is available under the circumstances presented here, where a junior appropriator seeks to divert upstream of a reservoir that has the necessary water rights, capacity, and needs to make use of all inflows during the period in question. Rather, these memoranda are consistent with the understanding that upstream diversions will not come from unappropriated water but will instead come at the expense of those who divert at the reservoir. Their approach assumes that the only water right holders affected by the upstream diversion are those with rights to the downstream reservoir, and that if these concerns are resolved through protest resolution, a permit can be issued even though it allows a diversion when no unappropriated water is available.

Even if this assumption were valid, Fahey-88 and Fahey-89 would not support the conclusion that a diversion under a junior water right is authorized if it occurs in violation of permit terms or protest resolution terms established to protect the water rights for the downstream reservoir. Moreover, the assumption that any harm will fall exclusively on the reservoir operator is invalid if natural flow and other sources are so limited that there is no water available under even the reservoir operator’s water rights. In this case, the harm will fall on other, more senior water right holders. Similarly, the harm may not fall exclusively on the reservoir operator if, due to reduced reservoir inflows, the reservoir cannot be operated to meet all requirements set to protect senior rights downstream or instream beneficial uses. For the foregoing reasons, the State Water Board rejects Fahey’s argument that year-round diversion is allowed under his water rights pursuant to Fahey-88 and Fahey-89.

5.2.2.4 The Water Availability Analysis Is Not an Underground Regulation

In a footnote, Fahey objects that the water availability analysis prepared by the Prosecution Team is an underground regulation, citing *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 234 Cal.App.4th 214, 259–260. (Fahey’s Closing Brief, June 17, 2016, p. 20, fn. 8.) The Administrative Procedure Act (APA) requires that every regulation be adopted consistent with the APA’s procedural requirements unless an exception applies. (Gov. Code, § 11340.5, subd. (a).) A “regulation” is a rule, regulation, order, or standard of general application or “the amendment, supplement, or revision of any rule, regulation, order, or standard adopted by any state agency to implement, interpret, or make specific the law enforced or administered by it, or to govern its procedure.” (*Id.*, § 11342.600.) An “underground regulation” is “any guideline, criterion, bulletin, manual, instruction, order, standard of general application, or other rule, including a rule governing a state agency procedure, that is a regulation” within the APA’s definition, that has not been adopted as a regulation under the APA, and that is not exempt. (Cal. Code Regs., tit. 1, § 250, subd. (a).)

The water availability analysis is not a “regulation” within the meaning of the APA. The water availability analysis attempts to comprehensively forecast and evaluate water supply and demand conditions in the Sacramento San Joaquin Rivers and Delta and waterways tributary thereto. (See PT-7, p. 2, ¶¶ 6–9.) The Prosecution Team used this information, among other things, to “alert[] water right holders in critically dry watersheds that water may be unavailable to satisfy beneficial uses of junior priorities,” via notices, and to assist water resources management and planning. (PT-7, p. 3, ¶ 12; accord *id.*, pp. 3–4, ¶¶ 13–18; Fahey-75, pp. 4–5, ¶ 6; see also R.T., Jan. 25, 2016, 109:19–23 [testimony of John O’Hagan re: notices].) In doing so, the water availability analysis investigates stream systems and gathers evidence pursuant to the State Water Board’s authority to perform these functions. (See Wat. Code, § 183; PT-7, p. 2, ¶ 6.) Fahey has not explained how gathering, analyzing, and disseminating information pursuant to a predictive model could be a “regulation” as defined in section 11340.5 of the Government Code.

Unlike a regulation, the water availability analysis does not “declare how a certain class of cases will be decided.” (See *Morning Star Co. v. State Bd. of Equalization* (2006) 38 Cal.4th 324, 333–334.) Whether an individual diverter is engaged in an unauthorized use of water depends on the actual water supply and demand under particular circumstances, the diverter’s priority of right, and other factors. These facts may be established through evidence presented at

adjudicative hearings. (See Wat. Code, §§ 1055, subd. (c), 1831, subd. (b).) The watershed analysis does not implement, interpret, or make specific any law administered by the State Water Board, nor does it govern any procedures. (See *Morning Star Co.*, *supra*, 38 Cal.4th at 334.) The water availability analysis is simply evidence presented by a party to this proceeding to determine the existence of a fact relevant to the Board's inquiry in this proceeding, which concerns an alleged violation of Water Code section 1052. (See October 16, 2015 Notice of Public Hearing, p. 3.) The existence of a statute prohibiting diversion when certain facts are present does not transmute those facts into regulations. (See *Patterson Flying Service v. California Dept. of Pesticide Regulation* (2008) 161 Cal.App.4th 411, 429 [Contents of registered pesticide label were not an underground regulation where agency penalized exterminator for violating statutory prohibition against using a pesticide in conflict with its registered labeling].)

The fact that the Division issued notices to diverters does not make the water availability analysis a regulation within the meaning of the APA. The notices are not enforceable decisions or orders of the State Water Board. (Fahey-75, pp. 4–5, ¶ 6; PT-7, p. 3, ¶¶ 12–13; see also Wat. Code, §§ 1052, 1831 [describing process by which the Board may issue enforceable orders].) The notices do not make a determination that any individual diverter is taking water without authorization under the Water Code. (Fahey-75, pp. 4–5, ¶ 6.) Diverters who continue diverting after receiving a notice are not subject to penalties for violating the notice but may separately be subject to enforcement for violations of section 1052 of the Water Code if their diversions are in fact unlawful. (*Ibid.*; cf. *Duarte Nursey, Inc. v. U.S. Army Corps of Engineers* (E.D. Cal. 2014) 17 F.Supp.3d 1013, 1016, 1025 [“Notice of Violation” issued by Central Valley Regional Water Quality Control Board that “notifies plaintiffs of the Board's view that they are in violation of the law” was not ripe for judicial challenge absent an enforcement action].) For the foregoing reasons, the Board finds that the water availability analysis is not an underground regulation.

5.2.3 Fahey Diverted Water During 2014 and 2015 in Violation of His Permit Terms

In some cases, permit terms may establish specific requirements necessary to ensure that diversions under the permit are lawful. State Water Board precedent establishes that violating such permit terms is an unlawful diversion. For example, past Board orders have found that using water outside the authorized place of use for an appropriative right is trespass under section 1052 of the Water Code. (See Order WR 1999-01, p. 8.) Violating permit terms to the effect that water shall not be diverted until certain requirements are met, such as constructing a

fish screen and entering into an operating agreement with fish agencies, is an unlawful diversion. (Order WR 2008-0017, pp. 14–15.)

5.2.3.1 There is Sufficient Evidence in the Record to Support a Finding That Fahey Diverted Water During the FAS Period in Violation of His Permit Terms

Here, Fahey’s permits require him to provide “make-up” water into NDPR from a non-tributary source in an amount equal to his diversions during the FAS Period. (PT-19, pp. 1–2, ¶¶ 3–6; PT-15, pp. 6–7; Fahey-20, pp. 314–315; PT-16, pp. 9–10; Fahey-55, pp. 1202–1203.) Although Fahey may provide make-up water at any time of year, “no carryover will be allowed to subsequent years.” (PT-19, p. 2, ¶ 4.) This means that Fahey must provide make-up water on an annual basis. By Mr. Fahey’s own admission, Fahey has not positioned water in NDPR since 2011. (R.T., Jan. 25, 2016, pp. 195:24 to 196:21.)

Fahey contends that other terms in his permits forbidding him from interfering with NDPR operations or the Interveners’ water accounting also forbid him from providing replacement water on an annual basis. (See generally, Fahey’s Closing Brief, June 17, 2016, pp. 17:7 to 18:12.) “If Mr. Fahey simply replaced water that he diverted without notice . . . then Mr. Fahey would be forced to interfere with the complicated water accounting procedures at NDPR.” (*Id.*, p. 18:7–9; see also Fahey-1, p. 15 [arguing that Decision 995 is “obsolete.”]) Fahey is correct that delivering water into NDPR without notice could have this effect. It is perhaps for this reason that Fahey’s Water Exchange Agreement with MID and TID requires him to notify MID and TID, through semi-annual reports, of any FAS make-up water that he provides. (See PT-19, p. 2, ¶ 7.) MID and TID could then account for Fahey’s make-up water deliveries when coordinating their own activities with CCSF. Accordingly, the Board is not persuaded by Fahey’s argument that Terms 19 and 20 of Permit 20784 or Term 34 of Permit 21289 are incompatible or inconsistent.

As discussed in section 5.2.1 and Table 2, above, Fahey diverted 16.55 acre-feet over 102 days during the 2014 FAS Period and 8.78 acre-feet over 76 days during the 2015 FAS Period. In total, Fahey diverted 25.33 acre-feet over 178 days during the FAS Period in both years.

5.2.3.2 There Is Not Sufficient Evidence in the Record to Support a Finding That Fahey Diverted Water During the Non-FAS Period in Violation of His Permit Terms

During the non-FAS Period, Term 20 of Permit 20784 allows Fahey to divert water “adverse to the prior rights of San Francisco and the Districts,” i.e., the Interveners, if Fahey provides

replacement water within one year of an annual notification by the Interveners of their determination that Fahey's diversion "has potentially or actually reduced the water supplies of" the Interveners. (PT-15, p. 6.) Replacement water may be provided in advance and credited to future replacement water requirements. (*Ibid.*) Unlike the Water Exchange Agreement between Fahey, MID, and TID for diversions during the FAS Period, Term 20 does not expressly prohibit Fahey from pre-positioning replacement water and carrying it over from year to year. (Compare *ibid.* with PT-19, p. 2, ¶ 4.)

Term 34 of Permit 21289 allows Fahey to divert "adverse to the prior rights" of the Interveners if Fahey provides replacement water within one year of notification by CCSF of potential or actual water supply reduction caused by Fahey's diversion. (PT-16, p. 9.) Curiously, unlike Term 20 of Permit 20784, Term 34 of Permit 21289 *only* discusses notification by CCSF, not MID or TID. (Compare PT-15, p. 6 with PT-16, p. 9.) Fahey's obligations under Term 34 "shall take into consideration" Fahey's obligations under the Water Exchange Agreement. (PT-16, p. 9.) Replacement water may be provided in advance and credited for future replacement water requirements. (*Ibid.*) Like Term 20 of Permit 20784 but unlike the Water Exchange Agreement, Term 34 of Permit 21289 does not expressly prohibit Fahey from pre-positioning replacement water and carrying it over from year to year. (Compare *ibid.* with PT-19, p. 2, ¶ 4.)

As discussed in section 5.2.1 and shown in Table 2, above, Fahey diverted at least 2.80 acre-feet over 26 days in 2014 and 4.82 acre-feet over 37 days in 2015 during the non-FAS Period when water was not available to serve Fahey's priority of right. In total, Fahey diverted 7.62 acre-feet over 63 days during the non-FAS Period in both years when water was not available to serve Fahey's priority of right. Although the Interveners participated in the hearing for purposes of cross-examination and rebuttal, nothing in the record indicates that MID, TID, or CCSF ever notified Fahey as to whether his diversions had potentially reduced water supply to the Interveners, as required by Term 20 of Permit 20784 or Term 34 Permit 21289. (Fahey-1, p. 9; R.T., January 25, 2016, pp. 34:3–7, 170:13–15; see also Fahey Closing Brief, June 17, 2016, p. 11:21–22.) The Prosecution Team issued a draft CDO and an ACL Complaint to Fahey on September 1, 2015 (see PT-1; PT-2), which had the effect of communicating to Fahey the Prosecution Team's allegations that Fahey's non-FAS diversions were unlawful. The draft CDO and ACL Complaint are different, however, from the Interveners' notice to provide non-FAS replacement water under the terms of Fahey's permits.

Accordingly, we find that there is not sufficient evidence in the record to support a finding that Fahey's non-FAS diversions violated his permit terms.

5.3 Fahey's Defenses to Alleged Unlawful Diversion

Fahey's case-in-chief includes written testimony from G. Scott Fahey himself (Fahey-1), Ross R. Grunwald, a California Professional Geologist and a California Certified Hydrologist, (Fahey-71), and Gary F. Player, a professional geologist, (Fahey-73). Mr. Fahey's testimony provides (1) a history regarding the State Water Board's issuance of Permits 20784 and 21289, (2) a description of Water Exchange Agreement terms currently incorporated into Permits 20784 and 21289, and (3) a description of Fahey's response to the State Water Board's Notices of Unavailability issued during 2014 and 2015. (Fahey-1.)

Dr. Grunwald's written testimony consists of a December 15, 2015 letter to Fahey providing a summary of potential water supply impacts that could be attributed to Fahey's permitted operations. (See Fahey-71.) Dr. Grunwald's letter states:

[W]ater extractions from the various components of the system are much greater than any observed reduction in surface spring flow. . . . [¶] . . . [T]he reduction of spring flow is, on average, on the order of 30% of the volume of water removed from the wells and infiltration galleries installed by Sugar Pine Spring Water, LP. Since only 30% of the water withdrawn from system impairs the spring water flows, the remaining 70% is clearly sourced from percolating ground water beneath the site. . . . [¶] . . . [I]t is clear that the impairment of surface flow from the springs is much less than that reporting to the Sugar Pine Spring Water, LP, collection system.

(Fahey-71, p. 3.)

A July 14, 2010 water availability analysis prepared by Dr. Grunwald as a basis for issuance of Permit 21289 is enclosed with the letter.

Mr. Player's written testimony is limited to a December 14, 2015 letter to Fahey that compares the "natural features" of the springs developed by Fahey to "four distinguishing features of a spring." (Fahey-73, p. 1.) Mr. Player's testimony is presented to show "how little the Sugar Pine Springs diversions affect water availability." (Fahey-73, p. 4.)

5.3.1 Defenses to Unlawful Diversion Related to Replacement Water

5.3.1.1 There Is Sufficient Evidence in the Record to Support a Finding That Fahey Made Water Available in NDPR to Meet Fahey's Non-FAS Replacement Water Obligations

Fahey argues that he caused 88.31 acre-feet of water to be wheeled into NDPR by TUD between 2009 and 2011. In support of this argument, Fahey submitted an agreement for surplus water service from TUD, a TUD utility billing account history report, and testimony. (E.g., Fahey-33 [initial agreement for surplus water service between Fahey and TUD]; Fahey-70 [TUD utility billing account history report of deliveries between 2009 and 2011]; R.T., Jan. 25, 2016, pp. 185:20 to 186:23 [arrangement to provide replacement water through agreement with TUD], p. 196:18–19 [time period of deliveries]; but see Fahey-1, pp. 7, 10; R.T., Jan. 25, 2016, p. 193:2–5, p. 247:15–16.) The TUD utility billing account history report indicates that non-zero “[c]onsumption” occurred between May 15, 2009 and ended June 15, 2011. (Fahey-70, pp. 2–3 [note that dates listed are “read” dates].) This consumption was reported in unspecified metered units totaling 1,781. (Fahey-70, pp. 2–3.)

During cross-examination, Mr. Fahey testified that his contract with TUD was for delivery of water in miner's inch-days. (R.T., Jan. 25, 2016, p. 193:2–4.) This testimony is supported by the 2003 contract between Fahey and TUD for surplus water service, which shows a miner's inch as the rate listed on the application form prior to handwritten modification. (Fahey-33, p. 634; accord, Fahey-31.) If the metered units in the TUD utility billing account history report are miner's-inch days, then the report supports the consumption of 1,781 miner's-inch days of water. Using the standard conversion for miner's inches specified by Water Code section 24,¹⁸ 1,781 miner's-inch days is equivalent to 88.31 acre-feet. This is close to the 88.55 acre-feet and 1,751 miner's-inch days (i.e., 86.83 acre-feet using the standard conversion) to which Fahey testified. (Fahey-1, pp. 7, 10 [88.55 acre-feet]; R.T., Jan. 25, 2016, p. 193:2–5 [1,751 miner's-inch days and 88.55 acre-feet], *id.* p. 247:15–16 [88.55 acre-feet].)

The Prosecution Team and the Interveners had the opportunity to cross-examine Mr. Fahey and attempt to rebut his testimony regarding the volume of water he testified that TUD wheeled into NDPR on his behalf (i.e., approximately 88.31 acre-feet); neither challenged it. (See R.T.,

¹⁸ The standard miner's inch is a rate of flow of water equivalent to 1.5 cubic feet per minute, measured through any aperture or orifice. (Wat. Code, § 24.) A miner's-inch day is a volume of water equivalent to the flow of one miner's inch for a period of one day, i.e., 2,160 cubic feet or approximately 0.049587 acre-feet.

Jan. 25, 2016, p. 224:10–20.) The Prosecution Team instead focused its rebuttal on the issue of whether NDPR had spilled after June 15, 2011, which might impact the amount of wheeled water available to Fahey to meet the terms of his permits and the Water Exchange Agreement following a spill. The hearing officers’ May 23, 2016 Procedural Ruling determined that the rebuttal evidence and testimony submitted by the Prosecution Team on this point should be excluded. (See May 23, 2016 Procedural Ruling, pp. 9–10, 17; but see PT-72, p. 45 [Mr. Fahey stating that NDPR was “being operated to avoid the overflow of its dam” as of July 7, 2011].) The Prosecution Team did not pursue the issue further in its closing brief. (But see May 23, 2016 Procedural Ruling, p. 10 [discussing legal questions raised].) We are not presented with and do not consider arguments as to the legal significance of operating NDPR to avoid the overflow of its dam vis-à-vis the replacement water Fahey pre-positioned in NDPR prior to such operations. However, we note that both Term 20 of Permit 20784 and Term 34 of Permit 21289 relieve Fahey of his obligation to provide replacement water “during periods when the [Intervenors] reservoirs are spilling or being operated in anticipation of a spill.” (PT-15, pp. 6–7; PT-16, p. 9.)

The Intervenors’ closing brief contends that “Fahey has provided no evidence or information . . . that the water he acquired from TUD was actually delivered to NDPR.” (Intervenors’ Closing Brief, June 17, 2016, p. 9:18–19.) Characterizing the TUD utility billing account history report, exhibit Fahey-70, as “a billing ledger,” the Intervenors assert that “Fahey has provided no information in this proceeding or otherwise about the source, amount and location of the deliveries to NDPR.” (*Id.*, p. 9:20–22.) In general, the purpose of a closing brief is to summarize and interpret evidence in the record and advance legal arguments.

Cross-examination is an appropriate means to challenge the credibility of a witness. Rebuttal exhibits are an appropriate means to explain, contextualize, or challenge case-in-chief exhibits and testimony. Mr. Fahey’s testimony to the effect that he “had TUD wheel 88.55 acre-feet of surplus water to [NDPR]” was available to the Intervenors well in advance of the hearing. However, the Intervenors declined to question Fahey on cross-examination and declined to introduce rebuttal exhibits or testimony. (R.T., Jan. 25, 2016, p. 115:16–19; *id.*, p. 224:10–20; R.T., Jan. 26, 2016, pp. 69:25 to 70:7; *id.*, pp. 136:22 to 137:4; but see R.T., Jan. 25, 2016, p. 112:11 et seq. [MID counsel asking that certain Prosecution Team exhibits be read into the record].) As such, the Intervenors’ late, conclusory assertions of doubts presented in their closing brief deserve little weight, if any at all.

The State Water Board finds that Fahey's exhibits and witness testimony support a finding that Fahey delivered about 88.31 acre-feet of water to NDPR between 2009 and 2011. Table 3 below summarizes the consumption of water per year between 2009 and 2011 according to the TUD utility billing account history report (Fahey-70).

Table 3. Yearly water deliveries via TUD to NDPR for 2009–2011.

Year	Read Date Range ^a	"Consumption" Units ^a (miner's-inch days ^b)	"Consumption" Volume (af)
2009	6/15 – 10/15	685	33.97
2010	5/15 – 10/15	822	40.76
2011	5/15 – 6/15	274	13.59
Total		1,781	88.31*

* This total is the sum of unrounded figures. As a result, it differs slightly from the sum of the rounded component values shown.

^a Data Source: Fahey-70.

^b Mr. Fahey testified that the unspecified units in Fahey-70 are miner's-inch days. (R.T., Jan. 25, 2016, p. 193:2–4.) The standard miner's inch is a rate of flow of water equivalent to 1.5 cubic feet per minute, measured through any aperture or orifice. (Wat. Code, § 24.) A miner's-inch day is a volume of water equivalent to the flow of one miner's inch for a period of one day, or 2,160 cubic feet or approximately 0.049587 acre-feet.

From the TUD utility billing account history report (Fahey-70), as summarized by Table 3, the Board concludes that Fahey caused TUD to deliver 685 metered units to NDPR in 2009, 822 metered units in 2010, and 274 metered units in 2011. Per the Water Exchange Agreement, this water would be used to satisfy Fahey's make-up water obligations for diversions during the FAS Period (June 16 to October 31) in each respective year that it was delivered. (See PT-19, p. 2, ¶ 4.) Fahey's FAS Period diversions in 2009, 2010, and 2011, as reported in exhibits Fahey-51, Fahey-52, and Fahey-56, are summarized in the Table 4 below.

Table 4. Yearly balance of FAS Period water diversion and delivery via TUD for 2009-2011.

Month	Volume of Diversion During FAS Period by Year (af)		
	2009 ^a	2010 ^b	2011 ^c
June ^d	3.06	2.07	3.40
July	4.85	4.62	5.70
August	4.86	5.06	6.57
September	4.23	4.46	4.57
October	3.80	3.72	4.62
Total Diversion	20.81*	19.93	24.87*
TUD Delivery^e	33.97	40.76	13.59
Balance	13.16*	20.83	-11.28*

* All totals in this table are the sum of unrounded figures. As a result, some totals (those marked) differ slightly from the sum of the rounded component values shown.

af - acre-feet

^a Data Source: Fahey-51.

^b Data Source: Fahey-52.

^c Data Source: Fahey-56.

^d The FAS Period under consideration in this order is June 16 through October 31. Diversion data for 2009-2011 were only available in the record as a monthly total. To estimate the volume of diversion that occurred in the latter half of June (i.e., June 16 through 30), the volume of diversion shown in the table is half of that reported in the associated sources.

^e Data Source: Fahey-70. For the purpose of this analysis, this order assumes that TUD's metered "consumption" unit, which is unspecified in Fahey-70, is miner's-inch days.

Assuming that Fahey's June FAS Period (June 16 through 30) diversions for 2009 through 2011 are half of Fahey's total June diversions, 13.16 acre-feet from the 2009 TUD deliveries and 20.83 acre-feet from the 2010 TUD deliveries remained in the reservoir after accounting for Fahey's FAS Period diversions under the Water Exchange Agreement. For 2011, Fahey's FAS Period diversions exceeded TUD deliveries by 11.28 acre-feet, creating a deficit in that year. Therefore, absent a spill, and setting aside the requirement to provide all FAS Period make-up water during the same year it is diverted (see 2011 water delivery deficit shown in Table 4 above), approximately 22.70 acre-feet¹⁹ remained in the reservoir at the end of 2011.

The Prosecution Team objected that Fahey does not have rights to store water in NDPR (Prosecution Team's Closing Brief, June 17, 2016, p. 12:15–19); however, Fahey's permits do

¹⁹ This value was calculated using unrounded component values and, as a result, differs slightly from the sum of the rounded monthly component values shown in Table 4.

not require that he provide replacement water under his own rights or at a rate identical to his rate of direct diversion. (See generally PT-15; PT-16.) Such a requirement would be inconsistent with permit terms that allow Fahey to provide water via credit for diversions adverse to CCSF's claims of right upstream of both NDPR and Fahey. (PT-15, p. 6, ¶ 20; PT-16, p. 9, ¶ 34; see generally, e.g., Fahey-14; Fahey-15.) Therefore, at the end of 2011, approximately 22.70 acre-feet of Fahey's "wheeled water" remained in the reservoir and were available to satisfy Fahey's non-FAS obligations if he was called upon by the Interveners to provide replacement water.

5.3.1.2 There Is Sufficient Evidence in the Record to Support a Finding That Fahey Had a Defense to Unlawful Diversion for Diversions During the Non-FAS Period in 2014 and 2015 When Water Was Not Available to Serve His Priority of Right

Fahey's permit terms, which incorporate agreements between Fahey and the Interveners, provide the opportunity for a partial defense to unlawful diversion during the non-FAS Period when water is not available to serve his priority of right. Specifically, if Fahey provides replacement water to NDPR within one year of being properly notified that his diversion "has potentially or actually reduced the water supplies of" the Interveners, then Fahey may divert "adverse to" the rights of MID, TID, and CCSF in an equal amount. (See PT-15, pp. 6–7 [Permit 20784 Term 20]; PT-16, pp. 9–10 [Permit 21289 Term 34]; see also section 5.1.3, *supra*.) Diversions during a period when water is not available to Fahey are "adverse to" the Interveners' prior rights if water is available for diversion by at least one of the Interveners' qualifying prior rights or claims of right during the period that Fahey diverts. Therefore, Fahey can establish a defense to unlawful diversion by providing replacement water to the Interveners for diversions "adverse to" their rights under these circumstances.

Fahey's permits do not identify a specific right held by MID, TID, or CCSF against which Fahey may adversely divert. The permits specify only that Fahey "shall provide replacement water to New Don Pedro Reservoir for water diverted under this permit which is adverse to the prior rights of San Francisco and the Districts." (PT-15, p. 6, ¶ 20; PT-16, p. 9, ¶ 34.) A natural interpretation of this sentence is that Fahey may provide replacement water to NDPR for diversions adverse to any prior right or claim of right held by MID, TID, or CCSF. This understanding is consistent with permit language that waives Fahey's obligation to provide replacement water "during periods when the Districts' and San Francisco's reservoirs are spilling" (PT-15, pp. 6–7, ¶ 20; PT-16, p. 9, ¶ 34; accord Fahey-15, p. 248 [original protest dismissal term proposed by CCSF].) The use of the plural "reservoirs" strongly suggests that

the parties intended the replacement water term to apply to diversions “adverse to” the Interveners’ claims of prior right at other reservoirs in addition to NDPR. CCSF exercises claims of right at other reservoirs, further supporting this view. Table 5, below, summarizes the Interveners’ recorded rights and claims of right on the Tuolumne River according to the State Water Board’s Electronic Water Rights Information Management System (eWRIMS) Database.²⁰

²⁰ The eWRIMS Database System provides information about water rights throughout California, and is searchable by name, watershed, stream system, or county. The Board takes official notice of this information obtained from our eWRIMS Database System pursuant to title 23, section 648.2 of the California Code of Regulations and section 452, subdivision (h) of the Evidence Code.

Table 5. eWRIMS Records of Interveners' Water Rights and Claims of Right on the Tuolumne River

Type of Right/Claim	Reported Year of First Use and/or Priority Claim	Registered Owner(s)*	Diversion Works Name	Use	Water Right ID
Riparian	1923	MID & TID	Don Pedro Powerhouse	P	<u>S013849</u>
Pre-1914	1900	MID & TID	La Grange Dam	Ir, M, P, R	<u>S013848</u>
	1908	CCSF (c/o HHW&P)	O'Shaughnessy Dam	M, P, R	<u>S002635</u>
	1918	CCSF	Lake Eleanor Dam	Ir, M, P	<u>S002636</u>
	1918	CCSF	Lake Cherry Diversion Dam	Ir	<u>S014379</u>
	1925	CCSF (c/o HHW&P)	Early Intake Reservoir	In, M, P	<u>S002637</u>
	1927	CCSF	Unnamed diversion from Canyon Ranch Creek	Ir	<u>S018735</u>
	1960	CCSF	Cherry Valley Dam	In, M, P	<u>S002638</u>
	Unknown	CCSF	Scoggins Dam	D	<u>S018734</u>
Post-1914	1919	MID & TID	NDPD	P, R	<u>A001232</u>
	1919	MID & TID	NDPD, La Grange Dam	Ir	<u>A001233</u>
	1919	MID & TID	NDPD	P	<u>A001532</u>
	1922	TID	La Grange Power Plant	P	<u>A003139</u>
	1923	MID & TID	La Grange Dam	Ir	<u>A003648</u>
	1930	MID & TID	La Grange Dam	Ir	<u>A006711</u>
	1940	MID & TID	NDPD, La Grange Dam	P	<u>A009996</u>
	1940	MID & TID	La Grange Dam	Ir	<u>A009997</u>
	1951	MID & TID	NDPD, La Grange Dam	Ir, R	<u>A014127</u>
	1951	MID & TID	NDPD, NDPP	P, R	<u>A014126</u>
	1961	MID, TID, & others	Multiple locations tributary to NDPR	S	<u>A020324</u>

* "Registered Owner(s)" include non-primary owners.

D - Domestic

HHW&P – Hetch Hetchy Water and Power

In - Industrial

Ir – Irrigation

M – Municipal

NDPD – New Don Pedro Dam

NDPP – New Don Pedro Powerhouse

P – Power

R – Recreation

S – Stockwatering

The record and eWRIMS do not contain evidence of an active water right or claim of right that is senior to Fahey's on the mainstem Tuolumne River or on its tributaries downstream of Fahey between Fahey's points of diversion and NDPR.²¹ (R.T., January 25, 2016, pp. 75:19–23, 76:9–14.) This rules out the possibility that Fahey's diversions were "adverse to" some other diverter and not to MID and TID's operations at or below NDPR. According to Table 5, MID and TID's most senior claim of right to which Fahey can adversely divert is at La Grange Dam with a claimed priority date of 1900. Assuming for the sake of argument that the water availability analysis accurately predicted a cutoff for water availability everywhere in the San Joaquin River basin for all post-1914 rights in 2014 and for all post-1902 rights in 2015 (but see generally Order WR 2016-0015, pp. 14–16), water would still be available to serve this claim of right. The Prosecution Team does not appear to disagree with this conclusion. (E.g., Prosecution Team's Closing Brief, June 17, 2016, p. 7:21–24 [discussing priority date cutoffs for water availability in 2014 and 2015].) Fahey could have physically provided replacement water to MID and TID's operations at La Grange Dam by coordinating releases of the water he pre-positioned in NDPR. Alternatively, MID and TID could use water that Fahey delivered to NDPR to serve the same uses as those claimed at La Grange Dam.

In section 5.2.2.2, the State Water Board determined that water was not available from at least May 27 through October 31 and November 4 through 18, 2014, and from April 1 through at least November 1, 2015 to serve Fahey's priority of right. As discussed in section 5.2.1, Fahey diverted at least 7.62 acre-feet over 63 days during the non-FAS Period from May 27 through June 15, 2014, November 4 through 18, 2014, April 23 through June 15, 2015, and November 1, 2015. In section 5.3.1.1, the Board determined that about 22.70 acre-feet of the wheeled water that Fahey provided to NDPR remained in the reservoir and was available to satisfy his non-FAS replacement water obligations if he received notice pursuant to his permit terms.²² Therefore, Fahey had more than enough water in NDPR to satisfy his replacement water obligation to the Interveners for his non-FAS Period diversions in 2014 and 2015 when water

²¹ The [eWRIMS Web Mapping Application](#) provides the spatial location of water rights throughout California and is searchable by name, watershed, stream system, or county. The State Water Board takes official notice of this information obtained from our eWRIMS Web Mapping Application pursuant to title 23, section 648.2 of the California Code of Regulations and section 452, subdivision (h) of the Evidence Code.

²² The stated amount of wheeled water remaining in NDPR in 2011, 22.70 acre-feet, assumes NDPR did not spill, and was not operated in anticipation of spill, since 2009. (See May 23, 2016 Procedural Ruling, pp. 9–10, 17 [rebuttal evidence and testimony submitted by the Prosecution Team on the issue of whether NDPR spilled after June 15, 2011 should be excluded].) Nothing in this order shall be construed as a finding on the amount of water Fahey has available to serve his current or future water obligations.

would not otherwise be available to serve his priority of right. For the foregoing reasons, the Board finds that there is sufficient evidence in the record to support a finding that Fahey had a defense to unlawful diversion for his diversions during the non-FAS Period in 2014 and 2015 when water was not available to serve his priority of right.

5.3.1.3 There Is Sufficient Evidence in the Record to Support a Finding That Fahey Did Not Have a Defense to Unlawful Diversion for Diversions During the FAS Period in 2014 and 2015 When Water Was Not Available to Serve His Priority of Right

The Water Exchange Agreement between Fahey, MID, and TID provides the possibility of a partial defense to unlawful diversion for Fahey's diversions during the FAS Period. If Fahey provides "make-up" water to MID and TID in the same year before, during, or after the FAS Period, he may divert adverse to the rights of MID and TID during the FAS Period. (PT-19, pp. 1–2, ¶¶ 3–5; but see *id.*, p. 1, ¶ 2.) During the FAS Period, water would ordinarily never be available to Fahey at his priority of right. As such, providing make-up water to MID and TID will always provide a defense to unlawful diversion when water was available for diversion under MID and TID's rights. For the purposes of this partial defense, it is immaterial whether, in a particular year, FAS Period water that would normally not be available to Fahey is also not available to other downstream rights junior to MID and TID's claims of right.

Providing water to MID and TID under the Water Exchange Agreement would not by itself provide Fahey with a defense to unlawful diversion relative to other downstream water rights with priority dates senior to Fahey's. The record does not contain evidence of a claim of right senior to Fahey's on the mainstem Tuolumne River or on its tributaries downstream of Fahey between Fahey's points of diversion and NDPR. (R.T., January 25, 2016, pp. 75:19–23, 76:9–14; see also section 5.3.1.2, *supra*.) However, Prosecution Team witnesses testified that there are other water rights or claims of right downstream of both NDPR and Fahey and senior both to Fahey's rights and to MID and TID's post-1914 rights at NDPR. (E.g., R.T., Jan 25, 2016, pp. 49:23 to 50:9; R.T., Jan 26, 2016, pp. 18:8 to 19:9; PT-9, p. 6, ¶ 32; see also R.T., Jan 25, 2016, p. 36:23–25.) If there was not sufficient water in the Tuolumne River to allow MID and TID to divert under their most senior claims of right, Fahey's FAS Period diversions would be unlawful. In this situation, Fahey's diversions would deprive a third-party downstream senior right holder of water to which the downstream senior was entitled. In order to have a defense to unlawful diversion in this situation, Fahey would need to establish a separate agreement with the third party downstream senior right holder or otherwise provide them with "make-up" water.

Unlike non-FAS Period replacement water under Term 20 and Term 34, “make-up” water owed to MID and TID for diversions during the FAS Period cannot be carried over from year to year. (PT-19, p. 2, ¶ 4.) The Water Exchange Agreement between Fahey, MID, and TID is unmistakably clear that “Fahey may pump more water than is required under this Agreement and build a surplus prior to the period of unavailability; however, no carryover will be allowed to subsequent years.” (*Ibid.*) Fahey last caused water to be delivered into NDPR in 2011. (R.T., Jan. 25, 2016, pp. 195:24 to 196:5.) Fahey conceded on cross-examination that he did not buy water from TUD in 2014 or 2015. (*Id.*, p. 196:4–5, 16–21; see also PT-9, p. 6, ¶¶ 29–30; PT-72, pp. 41–42.) Because Fahey does not have water in NDPR capable of satisfying his obligations to MID and TID for the water he diverted during the 2014 and 2015 FAS Periods, Fahey does not have a defense against unlawful diversion for his FAS Period diversions even if water was available to them. Because the terms of the Water Exchange Agreement were not met, it does not provide a defense to unlawful diversion.

5.3.2 Defenses to Unlawful Diversion Related to Developed Water

5.3.2.1 There Is Not Sufficient Evidence in the Record to Establish That Fahey’s Diversions Constitute Percolating Groundwater or “Developed Water” That Could Establish a Defense to Unlawful Diversion

Fahey contends that part of his diversions for 2014 and 2015 constitute groundwater or developed water and were therefore lawful. Fahey’s 1997–2014 progress reports for Permit 20784 have generally included a separate monthly tally of the volume of water “appropriated” and “developed” under the permit. (See generally Fahey-21 through Fahey 26; Fahey-45; Fahey-48 through Fahey-52; Fahey-56 through Fahey-58; Fahey-62.) Mr. Fahey described a general process for evaluating output from springs during his rebuttal testimony (R.T., Jan. 26, 2016, p. 101:8–20), indicating his familiarity with methods for distinguishing the spring’s natural output from percolating groundwater. However, Fahey’s progress reports do not provide calculations, records, or other supporting information to substantiate or explain why some of his diversions are characterized as developed water.

At the hearing, Mr. Fahey testified that he understands his reported diversions of “developed water” to be percolating groundwater. (R.T., Jan. 25, 2016, p. 220:9–13.) He also testified that he reports his diversions this way based on a 1994 conversation with a State Water Board employee during a field investigation for his application to appropriate water. (*Id.*, p. 220:18–22.) Prosecution Team witness Katherine Mrowka disputed whether Fahey’s reported

diversions of developed water constituted developed water or groundwater and argued that the reported diversions were surface water. (R.T., Jan. 26, 2016, pp. 27:20 to 29:1.)

Fahey's 2014 progress reports for Permit 20784 and Permit 21289 do not allege to have diverted any developed water. (See Fahey-62, p. 1285 [indicating zeros in the "Developed Right" rows for each month of 2014]; PT-59 [same]; PT-57 [foundation for PT-59].) These admissions would appear to preclude the possibility of a developed water defense to unlawful diversion under either permit for 2014, and Fahey does not explain the discrepancy. Fahey's 2015 progress report and the attached spreadsheet for Permit 20784, filed April 13, 2016, do not report diversions of developed water. For Permit 21289, Fahey's revised 2014 progress report, 2015 progress report, and the attached 2014 spreadsheet and 2015 spreadsheet, all of which were filed on April 13, 2016, do report that Fahey diverted developed water in 2014 and 2015. The State Water Board takes official notice of the foregoing information pursuant to title 23, section 648.2 of the California Code of Regulations and section 452, subdivision (h) of the Evidence Code.

Fahey's case-in-chief included expert witness testimony by Dr. Grunwald to further support his argument that he diverts groundwater or developed water. (See Fahey-72.) Dr. Grunwald estimated that Fahey's diversions reduce spring flow tributary to the Tuolumne River "on the order of 30[percent] of the volume of water removed from the wells and infiltration galleries installed by Sugar Pine Spring Water, LP." (Fahey-71, p. 3.) Dr. Grunwald also testified that "the remaining 70[percent]" of Fahey's diversions are "clearly sourced from percolating ground water beneath the site." (*Ibid.*) These estimates are based on Dr. Grunwald's experience with Fahey's diversion facilities from 1996 to the present. (*Ibid.*; see also R.T., Jan. 25, 2016, p. 177:16–25.) However, Dr. Grunwald concedes that these 70 percent and 30 percent figures are "estimates," and that "[a] detailed study of water withdrawals and spring flow must be made in order to establish a more definitive ratio between surface flow impairment and withdrawal of percolating ground water." (Fahey-71, p. 3.)

Fahey also relies on a conversation between Mr. Fahey and Division employee Yoko Mooring in support of his argument that he diverts groundwater. Fahey's exhibits include a January 30, 2003 contact report prepared by Ms. Mooring obtained from the correspondence file for Permit 21289 (Application 31491). (See Fahey-29, p. 618.) In the contact report, Ms. Mooring opines that "[h]is [Fahey's] source appears to be groundwater." (*Ibid.*) In rebuttal, Ms. Mrowka testified

that determining whether or not Fahey's diversions constitute developed water would require site-specific analysis of each spring, in its undeveloped state by a geologist, and would also require analysis of the subsurface formation supplying water to the spring. (R.T., Jan. 26, 2016, p. 29:2–15.)

The State Water Board's water right permitting and licensing authority is limited to diversions from surface streams and underground streams flowing in known and definite channels. (Wat. Code, §§ 1200–1201.) California law presumes that a spring tributary to a stream is part of the stream and is therefore subject to the dual doctrines of riparian rights and prior appropriation. (E.g., *Gutierrez v. Wege* (hereinafter *Gutierrez*) (1905) 145 Cal. 730, 734.) The Board's permitting and licensing authority over water in a stream is not abrogated or limited by the fact that, in many cases, some of the flow in a stream or from a spring is supported by hydrologically interconnected groundwater. Instead, "[a]ll water flowing in any natural channel, excepting so far as it has been or is being applied to useful and beneficial purposes upon, or in so far as it is or may be reasonably needed for useful and beneficial purposes upon lands riparian thereto, or otherwise appropriated, is hereby declared to be public water of the State and subject to appropriation in accordance with the provisions of this code." (Wat. Code, § 1201.) Even if the effect of diversion from a surface water body, subterranean stream, or spring is to increase the amount of hydrologically interconnected groundwater flowing into the surface water body, subterranean stream, or spring, the diversion is still subject to the Board's water right permitting and licensing authority and subject to the prohibition against unauthorized diversion or use of water under section 1052 of the Water Code. (See *id.*, §§ 1052, 1201.)

Evidently, Ms. Mooring was employed by the State Water Board as an Engineering Associate at the time that she filed her January 30, 2003 contact report. (See Fahey-36, p. 639.) For the reasons largely discussed above in section 3.1.4.2, we find that Ms. Mooring's opinion is irrelevant as to the truth of the legal question of whether Fahey is diverting groundwater or surface water. (Contra Fahey-29, p. 618.) Factually, the record is clear that Fahey's springs are tributary to various surface streams and ultimately to the Tuolumne River. (See Fahey-20, p. 311; Fahey-55, p. 1197.) As such, they are part of the surface stream and subject to the Board's authority. (*Gutierrez, supra* 145 Cal. at 734; see Wat. Code, §§ 1200, 1201.) We are not presented with a situation in which Fahey can be said to have been prejudiced by relying on non-precedential legal conclusions offered by Board staff. To the contrary, obtaining surface water rights subject to conditions negotiated to protect other legal users of water and the

environment would have insulated Fahey's diversions from challenge to the extent that he complied with those conditions.

Some early cases recognize a right to "developed water" from improvements to spring yields. In *Churchill v. Rose*, *supra*, 136 Cal. at 578–579, the Supreme Court held that a landowner who "dug out" a spring such that its flow "increased three fold" was "entitled to the increased amount of water thus developed." The court made this finding notwithstanding the senior rights of a downstream plaintiff to the spring's natural flow. (See *id.*, at 577.) But in *Gutierrez*, *supra*, 145 Cal. at 734, the court rejected an argument that a landowner who digs out a spring would thereby be entitled to "all the waters" of the spring. *Churchill* relied on "the uncontradicted testimony of several witnesses" to the effect that the spring was dug out by the defendant's predecessor and that yields from the spring increased thereafter. (*Churchill*, *supra*, 136 Cal. at 578.) Both *Churchill* and *Gutierrez* involved disputes among private landowners.

More recently, legal scholars have questioned whether the developed water concept remains legally sound. For example, Wells Hutchins contends, in what is arguably the lead treatise on early California water law, that, if groundwater is "developed" by digging out a spring that was already tributary to the stream, the rights of the landowner should be limited to a reasonable share of the common groundwater supply. (See Hutchins, *The California Law of Water Rights* (1956), pp. 386, 407.) As Scott Slater observes:

Although some of the early cases considered spring water added to the stream by artificial means to be "developed water," these cases would seem to be of limited validity under the modern view that the rights to hydrologically interconnected sources should be correlated.
(1 Slater, *California Water Law & Policy* (2015) ch. 8, §§ 8.03.)

Slater goes on to argue that, unless the spring water never joins the surface or percolating ground water supply under natural conditions, it would not qualify as developed water. (*Ibid.*)

Here, we need not rule on the developed water concept's soundness because Fahey has not presented sufficient evidence to support a finding that he diverts developed water.

Dr. Grunwald conceded that water extraction from Fahey's springs would decrease surface flows. (Fahey-71, p. 3; R.T., January 25, 2016, pp. 222:18–22, 223:10–25.) The extent to which Fahey's diversions affect surface flows is one to one, potentially, in a worst-case scenario. (See Fahey-71, p. 3). According to Fahey's own expert witness, "[n]o definitive

studies have been made to determine” what the actual reduction ratio of surface water to groundwater is. (*Ibid.*) Such studies would require detailed examination of the springs before they were developed, at least according to Ms. Mrowka (R.T., Jan. 26, 2016, p. 29:2–15), which is no longer possible for Fahey’s existing diversion facilities. For the foregoing reasons, we find that there is not sufficient evidence in the record to support a finding that Fahey diverts developed water or percolating groundwater.

5.3.2.2 *Pomeroy* Does Not Support a “Developed Water Presumption” or an Authorization for Division Under the Facts of This Proceeding

As discussed above in section 3.1.4.2, Fahey appears to argue that there is a presumption under California law that water diverted from a spring is developed water. However, this conclusion does not follow from the *Pomeroy* presumption that groundwater is not in a subterranean stream flowing in known and definite channels. California law presumes that a spring tributary to a stream is part of the stream. (*Gutierrez, supra*, 145 Cal. at 734; see also *Brewer v. Murphy* (2008) 161 Cal.App.4th 928, 931–932, 937 fn. 5 [declining to apply groundwater case law in dispute concerning riparian rights to a spring].)

Subterranean streams are an exception to a general rule governing groundwater. Judicial precedent has placed the burden of proving the existence of a subterranean stream, i.e., proving the exception, on the party seeking to establish the exception. (E.g., *Pomeroy, supra*, 124 Cal. at 628.) Similarly, developed water is an exception to a general rule governing the priority and availability of spring water. (See *Churchill, supra*, 136 Cal. at 577; 578–579.) We are not aware of any precedent placing the burden of proof on the party seeking to establish that this exception does *not* apply, and Fahey cites no such precedent. If anything, *Churchill, supra*, 136 Cal. at 578, which explicitly relied on uncontradicted witness testimony introduced by the party claiming a developed water exception, indicates that the party claiming to divert developed water bears the burden of proof. Accordingly, the State Water Board rejects Fahey’s argument that a “developed water presumption” should apply to this case.

5.4 Fahey’s Noncompliance with Bypass Flow Requirements in His Permits

The Prosecution Team’s exhibits and closing brief present evidence and arguments to the effect that Fahey has not met bypass flow requirements in his permits. (See generally Prosecution Team’s Closing Brief, June 17, 2016, pp. 18:20 to 19:7.) The Prosecution Team cites Order WR 2008-0017 and Order WR 99-001 in support of its argument that “[c]ontinued diversion in violation of permit terms that limit diversion amounts, require certain bypass flows, and require the maintenance of an exchange agreement is necessarily an ‘unauthorized diversion of water’

and subjects the diverter to liability under section 1052.” (*Id.*, p. 10:24–28, fn. 6.) Order WR 2008-0017 acknowledged the possibility that not all violations of permit terms would constitute unlawful diversion against the state. (See Order WR 2008-0017, p. 15.)

Above, we found that Fahey unlawfully diverted water during the FAS Period when it was not available to serve his priority of right and that Fahey unlawfully diverted water during the FAS Period in violation of permit terms requiring maintenance of the Water Exchange Agreement. Diverting water without complying with the bypass terms is itself an unauthorized diversion that would provide an independent basis for imposing civil liability even if Fahey’s diversions occurred at a time when water was available at Fahey’s priority of right. The Prosecution Team does not appear to have calculated separate violation days or proposed a distinct administrative civil liability amount for Fahey’s alleged non-compliance with bypass flow requirements. Therefore, the State Water Board will not consider whether Fahey’s alleged failure to meet bypass flows is a separate trespass for which additional civil liability would be appropriate. We consider Fahey’s bypass flow obligations further, below, in section 7.1.2.2.

6.0 A CEASE AND DESIST ORDER IS WARRANTED

Fahey unlawfully diverted water during a severe drought emergency in 2014 and 2015 when water was not available to serve his priority of right. There is evidence in the record to suggest that Fahey failed to provide FAS Period make-up water, as required by his permits, for a very long time prior to the current drought. Fahey has violated the prohibition against the unauthorized diversion of water and threatens to continue doing so. Accordingly, the State Water Board finds that issuance of a CDO is warranted.

6.1 Requirements of the Cease and Desist Order

The State Water Board finds that Fahey has violated and threatens to violate Water Code section 1052 by engaging in and threatening to engage in an unauthorized diversion of water. An order directing Fahey to cease and desist the continued and threatened unauthorized diversion by developing and implementing a Curtailment Operations Plan to prevent future unauthorized diversion of water during declared periods of water unavailability is appropriate. Once implemented, the operations plan must require Fahey to secure all approvals necessary to implement the operations plan from any local, state, or federal agencies.

7.0 ADMINISTRATIVE CIVIL LIABILITY IS WARRANTED

For the following reasons, the State Water Board finds that administrative civil liability is warranted for unlawful diversion under section 1052 of the Water Code.

7.1 Amount of Administrative Civil Liability

In determining the amount of civil liability, the board has taken into consideration all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the nature and persistence of the violation, the length of time over which the violation occurs, and the corrective action, if any, taken by the violator. (Wat. Code, § 1055.3.)

7.1.1 Extent of Harm Caused by the Violation

The State Water Board finds above that Fahey unlawfully diverted 25.33 acre-feet over 178 days during the FAS Periods in 2014 and 2015. Fahey's unlawful diversions occurred during a period for which the Governor has proclaimed a state of emergency due to drought conditions. (PT-27, pp. 1–2; see also PT-7, pp. 1–2, ¶ 5.) During these two years, water shortages were so severe that water was not available for many senior water right holders and claims of right on the Sacramento-San Joaquin Rivers and Delta (E.g., PT-42, PT-43, PT-153.) At the hearing, the Prosecution Team presented evidence that Fahey's unauthorized diversion reduced the amount of water available for every senior water right holder downstream (e.g., PT-9, pp. 6–7, ¶ 32–34; R.T., Jan 25, 2016, pp. 129:14 to 130:9), making an already dire water supply situation even worse.

It appears, based on officially noticed information in the State Water Board's files, that the most likely injured parties were MID and TID, whose most senior claim of right at La Grange Dam claims a priority date of 1900 for irrigation uses. (See Table 5, *supra*.) In the event that the water availability analysis was significantly too conservative, it is conceivable that MID and TID's licenses at NDPR with 1919 priority dates were injured. (See Table 5, *supra*). This is an unlikely possibility, based on the record, but one on which the Board cannot definitely rule given the available evidence. (See also generally Order WR 2016-0015, pp. 11–16 [discussing methods of proving unlawful diversion due to unavailability of water]; section 5.2.2.2, *supra* [same]). Fahey has not presented, and we did not consider, any argument or defense to the effect that the water would not have reached anyone entitled to divert it if Fahey had not curtailed his diversions. Fahey would have the burden of proving a claim that curtailment would be futile.

The Prosecution Team need not prove a specific injury to a specific diverter or a specific public trust resource to show harm under Water Code section 1055.3. To the contrary, the statute authorizes the State Water Board to consider “all relevant circumstances” when assessing a civil penalty, including but not limited to the relevant circumstance of whether a general or specific injury occurred. (Wat. Code, § 1055.3.) Requiring the Prosecution Team to prove harm to a specific diverter or public trust resource could perversely incentivize indiscriminate injury. This would be contrary to law and contrary to sound public policy. (Cf. *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 447 [state has an affirmative duty to take the public trust into account in the planning and allocation of water resources and to protect public trust uses whenever feasible].) Identifying particular injured parties could support a larger civil penalty under some circumstances, but this is not required. Proving unlawful diversion that deprived an identifiable class of downstream senior right holders or claimants of the unlawfully diverted water is sufficient.

7.1.2 Nature and Persistence of the Violation

Fahey unlawfully diverted 25.33 acre-feet over 178 days during the FAS Period in 2014 and 2015 without providing make-up water to MID and TID as would have been required by his permits and the Water Exchange Agreement for the diversion to be authorized. Evidence in the record shows that Fahey did not provide make-up water for his FAS Period diversions on a consistent basis in prior years. As discussed in section 5.3.1.1, Fahey failed to meet his obligation to provide make-up water for his full FAS Period diversions in 2011. (See Table 4 [demonstrating that Fahey did not provide sufficient make-up water for FAS Period diversions in 2011]; Prosecution Team’s Closing Brief, June 17, 2016, p. 15:15–25.) In addition, during the FAS Periods in 2012 and 2013, Fahey diverted at least 28.3 acre-feet and at least 10.4 acre-feet, respectively,²³ without providing any FAS Period make-up water in those years. (Fahey-57, p. 1265 [Permit 20784 reported 2012 diversions]; Fahey-58, p. 1269 [Permit 20784 reported 2013 diversions]; SWRCB-1, Permit 21289 Report of Permittee for 2012 and 2013; R.T., Jan. 25, 2016, pp. 195:24 to 196:3 [Fahey did not buy water from TUD in 2012 or 2013 because it was unavailable].) In 2009 through 2012, Fahey’s FAS Period diversions also violated Term 2 of the Water Exchange Agreement, which requires that Fahey divert no more than 17 acre-feet during the FAS Period in any year. (Fahey-51, p. 929 [Permit 20784 reported 2009 diversions]; Fahey-52, p. 1016 [Permit 20784 reported 2010 diversions]; Fahey-56,

²³ Of the total FAS Period water Fahey reported diverting in 2012 and 2013, Fahey claimed that 2.7 acre-feet and 8.0 acre-feet, respectively, was developed water. (But see section 5.3.2.1, *supra*.)

p. 1243 [Permit 20784 reported 2011 diversions]; Fahey-57, p. 1265 [Permit 20784 reported 2012 diversions]; PT-19, p. 1, ¶ 2 [Term 2].)

The record suggests that Fahey would have continued violating his permit terms and obligations under the Water Exchange Agreement indefinitely but for the Prosecution Team's intervention. Additional relevant circumstances related to the nature and persistence of the violation are discussed below.

7.1.2.1 Fahey Obtained an Economic Benefit from the Unlawful Diversion

Through Fahey's unlawful FAS Period diversions, he obtained the economic benefit of diverting water during a severe drought emergency while depriving downstream diverters of water to which they were entitled and avoiding the cost of providing make-up water to senior diverters. It is the State Water Board's duty to protect senior rights and the environment from unlawful diversion. (See Wat. Code, §§ 1051–1052.) All else equal, a civil penalty for unlawful diversion should at minimum recover enforcement costs and disgorge the economic benefit obtained from the violation. Disgorgement is particularly important during a critically dry year where scarce water is especially valuable and hence when incentives for unlawful diversion are especially strong. Fahey's economic benefit from his unlawful diversion during the FAS Period in 2014 and 2015 is not more than Fahey's gross sales during the period and is not less than the avoided cost of providing make-up water to senior diverters in those years, assuming, as is reasonable in this case, that this amount is not more than Fahey's net profit.

The record contains evidence as to Fahey's sales during two five- to six-month periods in 2014 and 2015 inclusive of much of the FAS Periods in those years. Fahey admitted that his "Invoice and Contract Sales" for the period from May to October 2014 totaled \$119,300.00 and that his "Invoice and Contract Sales" for the period from April to October 2015 was \$136,346.36. (PT-72, p. 4.) To estimate Fahey's total sales during the FAS Period in 2014 and 2015, the two years were considered separately due to customer pricing apparently increasing from 2014 to 2015. (PT-66, pp. 26-112; PT-67, pp. 6-9; PT-72, pp. 8-31 [invoiced sales volume]; PT-66, p. 113-114; PT-67, p. 10; and PT-72, pp. 8-31 [contract sales volume]; PT-56, p. 2; PT-57, p. 2; PT-65, pp. 6-8; and PT-67, pp. 6-10 [total volume of diversion reported]; PT-72, p. 4 [dollar amount of sales in 2014 and 2015]; Decl. of G. Scott Fahey in Support of Opposition to Motion,

Dec. 8, 2015, ¶ 4 [invoiced customers pay more than contract customers].)²⁴ During the aforementioned period in 2014 (i.e., May 1, 2014 through September 30, 2014), Fahey reported a total diversion of 18.04 acre-feet (PT-56, p. 2; PT-57, p. 2)²⁵; therefore, Fahey sold water he diverted during this period for an average of \$6,611.52 per acre-foot²⁶ (PT-72, p. 4 [sales during period in 2014]). During the aforementioned period in 2015 (i.e., April 1, 2015 through September 30, 2015), Fahey reported a total diversion of 16.74 acre-feet (PT-65, pp. 6-8; PT-67, pp. 6-10)²⁷; therefore, Fahey sold water he diverted during this period for an average of \$8,146 per acre-foot²⁸ (PT-72, p. 4 [sales during period in 2015]). Per Table 2, Fahey diverted 16.55 acre-feet during the FAS Period in 2014 and 8.78 acre-feet during the FAS Period in 2015. Therefore, a reasonable estimate of Fahey's gross sales, or maximum economic benefit, during the FAS Periods of 2014 and 2015 is \$181,000.²⁹

²⁴ Fahey sold less water overall and less water to invoiced customers, who pay a higher price per acre-foot, during the period for which he reported sales in 2015 than in 2014, yet his sales total was \$17,046.36 greater in 2015 than 2014. (PT-66, pp. 26-112; PT-67, pp. 6-9; PT-72, pp. 8-31 [invoiced sales volume]; PT-66, p. 113-114; PT-67, p. 10; and PT-72, pp. 8-31 [contract sales volume]; PT-56, p. 2; PT-57, p. 2; PT-65, pp. 6-8; and PT-67, pp. 6-10; 2015 Progress Report by Permittee for Permits 20784 and 21289 [total volume of diversion reported]; PT-72, p. 4 [dollar amount of sales in 2014 and 2015]; Decl. of G. Scott Fahey in Support of Opposition to Motion, Dec. 8, 2015, ¶ 4 [invoiced customers pay more than contract customers].) Therefore, assuming that the foregoing information is accurate, customer pricing could not have been consistent in 2014 and 2015. The State Water Board takes official notice pursuant to title 23, section 648.2 of the California Code of Regulations and section 452, subdivision (h) of the Evidence Code.

²⁵ The reported volume of water diversions from May through September 2014 was calculated by summing the volume of water directly diverted or collected to storage that was reported in the 2014 Progress Report by Permittee for Permits 20784 (PT-56) and 21289 (PT-57) and converting to acre-feet. The total reported volume of water diversion from May 1, 2014 through September 30, 2014 based on the aforementioned sources is 18.04 acre-feet. This total value was calculated using unrounded figures and then rounded based on the accuracy of the component values.

²⁶ This value was calculated using unrounded figures and then rounded based on the accuracy of the component values.

²⁷ The reported volume of water diversion from April through September 2015 was calculated by summing the volume of water directly diverted or collected to storage that was reported in the 2015 Progress Report by Permittee for Permits 20784 and 21289. The volume includes diversions claimed as developed water for the reasons discussed in section 5.3.2.1 of this order. The total reported volume of water diversion from April 1, 2015 through September 30, 2015 based on the aforementioned sources is 16.74 acre-feet. This total value was calculated using unrounded figures and then rounded based on the accuracy of the component values.

²⁸ This value was calculated using unrounded figures and then rounded to four significant figures based on the accuracy of the component values.

²⁹ This value is a reasonable estimate but not a precise calculation because Fahey's customers do not all pay the same price for the water Fahey provides and the proportion of the total water sold to each customer type (i.e., contract customer, invoiced customer, or "Special Invoice Customer") varies between the period for which total dollar amount of sales were reported and the FAS Period. (Decl. of G. Scott Fahey in Support of Opposition to Motion, Dec. 8, 2015, ¶ 4 [describing differences in unit price for spring water charged to "Special Invoice Customer" and other customers].) Pricing may also vary within years as it does between years (see footnote 21.) The estimate of Fahey's FAS Period earnings was calculated

Continued

There is no evidence in the record as to the avoided cost of providing FAS Period make-up water during 2014 and 2015 or other years during the drought emergency, making it difficult to precisely quantify Fahey's minimum economic benefit from unlawful diversion. In non-drought years, FAS Period replacement water was available from TUD for \$60 per acre-foot (R.T., Jan. 25, 2016, p. 191:2–8; see PT-72, p. 46), suggesting that Fahey normally sells his spring water to bottlers at a significant markup compared to what other users would normally pay to acquire water for other purposes. The Prosecution Team's opening statement acknowledges that the spring water "isn't raw ag. water, or even treated municipal water. It's a premium food-grade product that[,] fresh from the spring[,] needs little or no treatment." (R.T., Jan. 25, 2016, pp. 21:25 to 22:3; accord PT-46 [newspaper article discussing market value of Fahey's spring water as a food product].) During 2014 and 2015, the record shows that TUD water was unavailable. (R.T., Jan. 25, 2016, pp. 195:24 to 196:21; PT-72, pp. 41–42.) The severity of drought conditions in 2014 and 2015, when water was not available to serve many senior claims of right on the San Joaquin River and its tributaries (e.g., PT-42, PT-43, PT-153), suggests that an alternative source of FAS make-up water would have been more expensive. Therefore, Fahey's minimum economic benefit from unlawful FAS Period diversions can be reasonably assumed to be more than \$60 per acre-foot, or more than \$1,520.³⁰ The State Water Board will consider the issue of Fahey's economic benefit further, below, in section 7.2.

7.1.2.2 Fahey's Failure to Provide Mandatory Bypass Flows and Comply With Other Permit Terms Demonstrates Negligence

There is evidence in the record that Fahey failed to meet bypass flow requirements under his permits in 2014 and 2015. Permit 21289 requires Fahey to continuously bypass five gallons per minute (gpm) for each point of diversion. (PT-16, p. 6, ¶ 20.) If total streamflow is less than 5 gpm for each point of diversion, then Fahey's permits require him to bypass the full amount. (*Ibid.*) The purpose of these bypass flow requirements is to protect riparian habitat for aquatic wildlife and resolve a protest filed by the Central Sierra Resource Center. (See *id.*, pp. 1–2.) Fahey reported bypassing a total of less than 10 gpm in 2014 in June, July, September, and October and in 2015 from April through August. (PT-66, pp. 3–5; see also R.T., Jan. 25, 2016,

using unrounded figures and then rounded to four significant figures based on the accuracy of the component values.

³⁰ Fahey's minimum economic benefit was calculated by multiplying the cost of water from TUD in non-drought years (\$60 per acre foot) by the volume of water unlawfully diverted by Fahey during the FAS Period in 2014 and 2015 (25.33 acre-feet). The value was calculated using the unrounded volume and then rounded to four significant figures based on the accuracy of the component values.

pp. 119:25 to 120:19.) Fahey reported diverting from Marco and Polo Springs in all months of 2014 except January. (PT-59.) In 2015, he reported diverting from Marco and Polo Spring in every month except for August, when he only reported diverting from Marco Spring. (PT-65, pp. 3–8.) However, in August 2015, Fahey only reported bypassing 2.1 gpm. (PT-66, pp. 5.) Since he diverted from at least one spring in that month, Fahey was still required to bypass at least 5 gpm during that month.

The State Water Board finds that Fahey violated the bypass flow requirement in Permit 21289 for nine months in 2014 and 2015. Section 5.4 of this order declined to assess separate administrative civil liability for Fahey's failure to meet bypass flow requirements. While violation of the bypass flow requirements does not add to the number of days of violation or the amount unlawfully diverted, and thus does not increase the maximum liability that may be imposed, the violation is a relevant circumstance in determining the liability to impose. Violation of multiple requirements over a given period is a more serious than violation of a single requirement over the same period. It is also indicative of a lack of attention to permit requirements.

Fahey failed to meet other requirements of his permits even prior to 2014 and 2015. For example, between 2010 and 2014, Fahey's annual water use reports indicate violations of Term 5 of Permit 20784 by diverting at a rate exceeding the maximum rate of diversion allowed by the permit at one or both springs during 33 months of the 48-month period, including the entire FAS Period in 2010, 2011, and 2012.³¹ (PT-15, p. 4, ¶ 5 [maximum combined rate of diversion]; SWRCB-1, Permit 20784 Report of Permittee for 2010 and 2011; Fahey-57, p. 1265 [Permit 20784 Report of Permittee for 2012]; Fahey-58, p. 1269 [Permit 20784 Report of Permittee for 2013].) In addition, Fahey testified that he did not notify the State Water Board that he had positioned water in NDPR prior to his June 3, 2014 letter in violation of Terms 19 and 20 of Permit 20784 and Term 34 of Permit 21289, which require that he report to the Board the source, amount, and location at NDPR of replacement water discharged to the reservoir with his annual Progress Reports of Permittee. (R.T., Jan. 25, 2016, pp. 170:24 to 171:9 [Fahey did not inform Board of water replacement for his diversions in 2014]; PT-15, pp. 6–7, ¶¶ 19–20 [Term 19 and 20, Permit 20784]; PT-16, p. 9, ¶ 34 [Term 34, Permit 21289].)

³¹ In Fahey's Reports of Permittee for 2010 through 2013, Fahey reported a portion of the total water diverted in these years to be under a developed water right, not under Permit 20784. (But see section 5.3.2.1, *supra*.)

Failing to meet bypass flow requirements and reporting requirements suggests that Fahey has been careless, at best, in understanding and honoring his obligations.

7.1.2.3 Fahey Genuinely Misunderstood His Obligations to Senior Diverters

There is evidence that Fahey genuinely believed that the water he pre-positioned in NDPR from 2009 to 2011 counted towards FAS Period make-up water requirements and that his actions were sufficient to satisfy MID and TID. At the hearing, Mr. Fahey testified about a conversation he had with one LeRoy Kennedy circa 1992. According to Mr. Fahey, Mr. Kennedy represented MID and TID during their negotiations of the 1992 Water Exchange Agreement with Fahey. (R.T., Jan. 25, 2016, p. 158:14–24.) Per Mr. Fahey’s description of the conversation, Mr. Kennedy told Mr. Fahey that preparing the Water Exchange Agreement “was more effort than the amount of water deserved,” and that Mr. Kennedy “didn’t want me corresponding with regards to this document,” i.e., the Water Exchange Agreement, “to either of the districts.” (*Id.*, p. 159:22–25.) Mr. Fahey further testified that Mr. Kennedy “wanted me to respond. If they contacted me, and he said, ‘[y]ou will know when we contact you,’ . . . [b]ut prior to that I was not to correspond with the districts regarding the matter.” (*Id.*, pp. 159:25 to 160:4.) In their May 23, 2016 Procedural Ruling, the Hearing Officers found that Mr. Kennedy’s hearsay statements were admissible to support a finding as statements of a party-opponent and were also admissible to supplement and explain other evidence and to explain Mr. Fahey’s intent and understanding. (See May 23, 2016 Procedural Ruling, p. 14.)

The State Water Board is generally skeptical of this kind of testimony. Even if it is admissible, hearsay statements by party-opponents are unlikely to be credible if they are unsubstantiated, are uncorroborated by other evidence, or were made in the distant past. Here, however, there is at least some evidence in the record to corroborate Mr. Fahey’s recollection of his conversation with Mr. Kennedy. Other evidence in the record demonstrates that Mr. Kennedy existed and that he worked with Mr. Fahey on the Water Exchange Agreement and other matters related to Application 29977. (E.g., SWRCB-1, A029977, Correspondence File, Cat. 1, Vol. 1, Letter from G. Scott Fahey to LeRoy Kennedy, Turlock Irrigation District (April 7, 1992); *id.*, Letter from Arthur F. Godwin, Attorney for the Turlock Irrigation District, to G. Scott Fahey (Feb. 7, 1992) [cc’ing LeRoy Kennedy] [hereinafter Godwin Letter].) In the Godwin Letter, MID and TID’s attorney, Arthur F. Godwin, opines that “[a]ny water transfer will require considerable supervision by the Districts to ensure that a sufficient amount of water is being transferred.” (Godwin Letter.) MID and TID required Mr. Fahey to make a \$500 deposit “to cover any

necessary legal fees and staff time” before TID “evaluates any serious proposals.” (*Ibid.*) Mr. Godwin’s letter and the fact that TID required a deposit are consistent, at minimum, with the general idea that MID and TID were concerned about the amount of time and effort needed to supervise Fahey’s diversions during the period in which Fahey, MID, and TID were negotiating the Water Exchange Agreement.

Other evidence in the record corroborates at least a general understanding that the Interveners have been imperfect in their attention to the task of supervising Fahey’s activities since he received his first permit in 1995. The 1992 Water Exchange Agreement between Fahey, MID, and TID specifies that Fahey shall provide make-up water to NDPR for his FAS Period diversions by pumping an equivalent amount of groundwater from a specific well defined with specific geographic coordinates. (PT-19, pp. 1–2, ¶ 3.) By its terms, the Water Exchange Agreement “may be amended only by a written instrument executed by all the parties.” (PT-19, p. 2, ¶ 11.) Fahey contacted MID and TID by letter dated April 29, 1995 to formally request an amendment allowing him to provide make-up water from TUD instead of from a well. (SWRCB-1, A029977, Correspondence File, Cat. 1, Vol. 2, Letter from G. Scott Fahey to Attn: General Manager, Turlock Irrigation District (April 29, 1995); *id.*, Letter from G. Scott Fahey to Attn: General Manager, Modesto Irrigation District (April 29, 1995).) Fahey’s letters enclosed draft language proposing to amend paragraphs three and seven of the Water Exchange Agreement. (*Ibid.*) Fahey specifically requested MID and TID’s written approval of his proposed amendment before he would execute an agreement with TUD. (*Ibid.*)

MID and TID knew, or should have known, that Fahey’s 1995 protest settlement agreement with CCSF required water deliveries from a source other than the well. (E.g., SWRCB-1, A029977, Correspondence File, Cat. 1, Vol. 2, Letter from G. Scott Fahey to David Beringer, State Water Board (June 20, 1995) [clarifying that TUD replacement water is not hydrologically connected to NDPR; cc’ing MID and TID].) Yet nothing in the record or the correspondence file indicates that MID and TID ever required that the Water Exchange Agreement be amended in writing, notwithstanding the express condition that changes could only be made “by a written instrument executed by all the parties.” MID and TID protested Fahey’s Application 31491 on November 9, 2004. (Fahey-41, p. 687; see also SWRCB-1, A031491, Correspondence File, Cat. 1, Vol. 1, Protest of Modesto Irrigation District and Turlock Irrigation District, p. 4 (Nov. 9, 2004) [containing fourth page of protest not included in Fahey-41].) Response 3.F. of the protest states that “[t]he Districts further request that the State Board, prior to granting the Application,

require that the applicant provide to the Districts proof that it provided replacement water to New Don Reservoir [sic] as required by Paragraph 19 of Permit 20784 and subparagraph 2 of Paragraph 20 of said permit.” (SWRCB-1, A031491, Correspondence File, Cat. 1, Vol. 1, Protest of Modesto Irrigation District and Turlock Irrigation District, p. 4 (Nov. 9, 2004).) This request is notwithstanding the Water Exchange Agreement’s requirement that Fahey provide bi-annual reports to MID and TID showing the amount of water diverted monthly by Fahey and the amount of water discharged into NDPR. (PT-19, p. 2, ¶ 7.) The two permit terms referenced in MID and TID’s protest both explicitly refer to the Water Exchange Agreement. (See PT-15, p. 6, ¶ 19; *id.*, pp. 6–7, ¶ 20, subd. 2.)

Fahey replied to MID and TID’s protest by letter dated November 16, 2004. The letter states, among other things, that “Regarding response 3.F. of the Districts’ protest: the Districts may call Tuolumne Utility District, Joe Whitmer . . . to confirm that during 2004 41 ac-ft of Stanislaus River water was released into Lake Don Pedro, and that 41 ac-ft will be released from the same source to Lake Don Pedro in 2005.” (SWRCB-1, A031491, Correspondence File, Cat. 1, Vol. 1, Letter from G. Scott Fahey to Scott Tiffin, Counsel for MID and TID (Nov. 16, 2004).) Nothing in the correspondence file or the record indicates whether MID or TID ever contacted Mr. Whitmer or TUD.³² A March 18, 2011 letter from MID and TID’s attorney regarding their protest discusses Fahey’s agreement with TUD and quotes notice language discussing “a water exchange agreement with Turlock Irrigation District, Modesto Irrigation District, and the City and County of San Francisco for the period from June 16 to October 31 of each year when water is not available for appropriation in the Tuolumne River and the Sacramento-San Joaquin Delta systems.” (See Fahey-53, p. 1043; see also Fahey 39, p. 1.) However, MID and TID’s counsel’s letter does not discuss or even mention Fahey’s 1995 written request to amend the Water Exchange Agreement or the draft terms that Fahey provided to MID and TID. (See Fahey-53, pp. 1043–1044.) This letter does not discuss or even mention Fahey’s 2004 letter providing instructions for how to confirm that Fahey had delivered TUD water to NDPR in 2004. (*Ibid.*) The version of the water exchange agreement offered into evidence by both the Prosecution Team and Fahey—apparently, the operative version of the agreement—still

³² There is some evidence in the record indicating that records of water deliveries from TUD into NDPR prior to 2009 were not preserved, or that no deliveries occurred. Exhibit PT-72 includes an email from TUD staff to Fahey regarding an unsuccessful search for such records. (PT-72, p. 35.) Mr. Fahey also testified that no FAS replacement water was provided from TUD before 2009. (R.T., Jan. 25, 2016, 247:7–19.)

requires Fahey to provide make-up water from the well identified in 1992. (PT-19, pp. 1–2, ¶ 3; Fahey-6, pp. 130–131, ¶ 3.)

Fahey and CCSF negotiated a separate protest settlement agreement for Application 29977 between 1993 and 1995. (See generally, Fahey-12 to Fahey-19.) Ultimately, CCSF agreed to dismiss its protest in exchange for adding what is now Term 20 to Permit 20784. (Fahey-15; Fahey-19; see also PT-15, pp. 6–7, ¶ 20.) Fahey appears to have sent CCSF’s attorney, Christiane Hayashi, a draft copy of his replacement water contract with TUD under cover letter dated April 29, 1995. (SWRCB-1, A029977, Correspondence File, Cat. 1, Vol. 2, Letter from G. Scott Fahey to Christiane Hayashi, City and County of San Francisco (April 29, 1995).) The Division questioned whether TUD was an appropriate source of replacement water by letter dated June 14, 1995. (*Id.*, Letter from David Beringer, State Water Board to G. Scott Fahey (June 14, 1995).) Fahey evidently addressed these concerns during a June 20, 1995 telephone conversation, memorialized in a letter that carbon-copied all the Interveners, and the Division confirmed that it was satisfied by letter dated July 28 of that year. (*Id.*, Letter from G. Scott Fahey to David Beringer, State Water Board (June 20, 1995); *id.*, Letter from David Beringer, State Water Board to G. Scott Fahey (July 28, 1995); see also Fahey-65 [copy of July 28, 1995 letter].)

Fahey filed Application 31491 nearly a decade later. Fahey posted notices of the application on or about October 13, 2004. (SWRCB-1, A031491, Correspondence File, Cat. 1, Vol. 1, Statement of Posting Notice (rec’d Oct. 18, 2004); see also Fahey-39.) Dennis Herrera, City Attorney for CCSF, objected to the Notice’s contents by letter dated November 8, 2004. (Fahey-40, p. 685.) Among other concerns, Mr. Herrera objects that CCSF was “unaware that the applicant previously executed an agreement. On April 25, 1995 [sic] applicant submitted a draft agreement with Tuolumne Utilities District to the SWRCB, but the Board did not approve it as indicated in its letter of June 14, 1995.” (*Ibid.*) The State Water Board’s correspondence files do not contain an April 25, 1995 letter from Fahey to CCSF. Mr. Herrera is most likely referring to Fahey’s letter dated April 29, 1995, or perhaps to a similar letter. Copies of the Division’s June 14 and July 28, 1995 letters retained in the Board’s correspondence files do not indicate that CCSF was carbon copied on either letter, and it is unclear how Mr. Herrera obtained or reviewed a copy of the June 14 letter. (See SWRCB-1, A029977, Correspondence File, Cat. 1, Vol. 2, Letter from David Beringer, State Water Board to G. Scott Fahey (June 14, 1995); *id.*, Letter from David Beringer, State Water Board to G. Scott Fahey (July 28, 1995).)

Nothing in the correspondence files or the record indicates that CCSF ever contacted Fahey or the Board between 1995 and 2004 to obtain a copy of Fahey's final agreement with TUD.

Mr. Kennedy's hearsay statements would be stronger evidence, of course, if Fahey had contemporaneously documented them in some way. However, the fact that Fahey did not do so is not fatal. Likewise, under the circumstances of this case, the State Water Board is not troubled by the long passage of time that occurred between Mr. Kennedy's utterance and Mr. Fahey's opportunity to testify at the hearing. The conversation apparently happened when Mr. Fahey personally reached out to Mr. Kennedy to thank him for his help. (R.T., Jan. 25, 2016, pp. 158:25 to 159:8.) It is not so difficult to believe that an unexpected or ungracious response to being thanked could have endured in Mr. Fahey's memory for all these many years. MID, TID, and CCSF were all represented by counsel at the hearing. Each party had the opportunity to cross-examine Mr. Fahey and to challenge his recollection of the 1992 conversation with Mr. Kennedy. The Interveners declined to do so. (See R.T., Jan. 25, 2016, p. 224:10–20; R.T., Jan. 26, 2016, pp. 136:22 to 137:4.)

For all these reasons, Mr. Fahey's recollection of his conversation with Mr. Kennedy circa 1992 is credible. In section 5.3.1.1, above, the State Water Board found that Fahey delivered about 88.31 acre-feet of water into NPDR. The Board also found that about 22.70 acre-feet were still available if called upon to meet non-FAS Period replacement water requirements. Fahey's recollection of Mr. Kennedy's statements, and the pattern of interactions with the Interveners' described above, give credence to Mr. Fahey's testimony that he genuinely believed providing this water was good enough to meet his make-up water requirements during the FAS Period. This does not excuse or justify unlawful diversion, but it does inform the Board's civil penalty calculations and the Board's determination of what corrective measures are appropriate.

Fahey contends, in essence, that permit terms forbidding him from interfering with the Interveners' water accounting at NDPR prevent him from providing FAS Period make-up water unless called upon by the Interveners. (E.g., Fahey's Closing Brief, June 17, 2016, pp. 17:7 to 18:12.) This argument is without merit for the reasons stated in section 5.2.3.1, above. At the hearing, Mr. Fahey also testified that:

I am not going to risk 25 years of my life now, and my entire livelihood to save \$2,500 to gyp somebody out of a very miniscule amount of water in the big

picture. This is a very minor expense in my business. What reasonable person would risk a very small expense to go through something like this? (R.T., Jan. 26, 2016, p. 78:3–8.)

The State Water Board is inclined to agree. Fahey has invested decades of his life in his spring water business. He has worked to develop it since 1991. (Fahey-3.) FAS Period replacement water was available from TUD for \$60 an acre-foot in other years. (See PT-72, p. 46.) TUD water was not available in 2014 or 2015 (R.T., Jan. 25, 2016, pp. 195:24 to 196:21; PT-72, pp. 41–42), and the record does not indicate the going rate for other make-up water that may then have been available. Although the price of make-up water would probably have exceeded \$60 per acre-foot, it would be very surprising if Fahey could not obtain an acre-foot of replacement water from somewhere for less than \$6,612 to \$8,146. Fahey promptly filed curtailment certifications when asked, gave timely responses to inquiries from Board staff, and continued to report his diversions as required. (E.g., Fahey-60; PT-35; PT-36; PT-11, p. 3–4, ¶¶ 11–15; PT-13, p. 4, ¶ 20.)

The better explanation for the unlawful diversion is that Fahey genuinely believed he had already met his obligations to downstream senior diverters. Fahey's mistake, his apparent reliance on long-ago representations by the Interveners, his apparent reliance on the Interveners' failure to timely inform him of his error, and his experience working with the Interveners does not justify or excuse an unlawful diversion. All of these considerations, however, are relevant to setting an appropriate civil penalty for unlawful diversions that deprived the very same senior diverters of water and violated permit terms specifically crafted to protect their interests.

7.1.3 Length of Time over Which the Violation Occurred

Fahey made unauthorized diversions of water during the FAS Period for 178 days in 2014 and 2015. By his own admission, Fahey did not provide any water to MID or TID, as required by his permits and the Water Exchange Agreement with MID and TID, in either year. (R.T., Jan. 25, 2016, pp. 195:24 to 196:21; accord PT-9, p. 6, ¶ 30.) Fahey admitted that he last arranged to deliver water to NDPR in 2011. (R.T., Jan. 25, 2016, pp. 195:24 to 196:5.) Evidence in the record shows that Fahey did not provide make-up water for his FAS Period diversions on a consistent basis in prior years. As discussed in section 5.3.1.1, Fahey failed to meet his obligation to provide make-up water for his full FAS Period diversions in 2011. (See Table 4, *supra* [demonstrating that Fahey did not provide sufficient make-up water for FAS Period

diversions in 2011]; Prosecution Team’s Closing Brief, June 17, 2016, p. 15:15–25.) During the FAS Periods in 2012 and 2013, Fahey diverted at least 28.3 acre-feet and at least 10.4 acre-feet, respectively,³³ without providing any FAS Period make-up water in those years. (Fahey-57, p. 1265 [Permit 20784 Report of Permittee for 2012]; Fahey-58, p. 1269 [Permit 20784 Report of Permittee for 2013]; SWRCB-1, Report of Permittee for 2012 and 2013; R.T., Jan. 25, 2016, pp. 195:24 to 196:3 [Fahey did not buy water from TUD in 2012 or 2013 because it was unavailable].)

As discussed above in section 7.1.2, Fahey also appears to have violated numerous other permit terms including bypass flow requirements, maximum diversion rates, and reporting requirements for times between 2010 and 2015.

7.1.4 Corrective Action

The record does not identify any corrective actions taken by Fahey. As was discussed above in section 7.1.2.3, evidence in the record supports a finding that Fahey genuinely believed that he had FAS Period make-up water available for MID and TID if they called for it. Fahey promptly submitted a curtailment certification in response to the 2014 Unavailability Notice and 2015 Unavailability Notice. (See PT-35; PT-36.)

7.1.5 Other Relevant Circumstances

The Prosecution Team expended an estimated \$15,624 investigating Fahey’s diversions and preparing the enforcement action and estimated, as of December 15, 2015, that taking the case to a hearing would cost an additional \$10,000. (PT-9, p. 7, ¶¶ 37–38 [costs]; *id.*, p. 8 [date signed].) Apparently, actual Prosecution Team costs for the hearing were higher than initially anticipated due to attorney and staff time spent responding to prehearing motions. (R.T., Jan. 25, 2016, p. 43:21–23.) These figures do not include costs associated with the Hearing Officers’ time or staff costs for the personnel assisting them. All else equal, the State Water Board should set administrative civil penalties for unlawful diversion that at least recover the costs of an enforcement hearing.

Fahey’s pre-enforcement efforts to establish a defense to unlawful diversion are also relevant to determining an appropriate civil penalty for unlawful diversion. Fahey responded to the 2014

³³ Of the total FAS Period water Fahey reported diverting in 2012 and 2013, Fahey claimed that 2.7 acre-feet and 8.0 acre-feet, respectively, was developed water. (But see section 5.3.3.)

Unavailability Notice with a letter dated June 3, 2014 (Fahey-60) providing a Curtailment Form (Fahey-61). These documents describe the TUD water Fahey had delivered to NDPR between 2009 and 2011. (Fahey-60, p. 1277; Fahey-61, pp. 1278–1279; accord PT-7, p. 3, ¶ 14.) The record indicates that the Division did not deny or even follow-up on Fahey’s claimed defense prior to commencing its investigation. Prosecution Team witness John O’Hagan testified that there was not a process for responding to claimed defenses to unlawful diversion. (R.T., January 25, 2016, 109:12–23.) Prosecution Team witness David LaBrie testified that he left three voicemail messages for Mr. Fahey over the course of several weeks beginning in late May 2015, seeking to schedule a compliance inspection (*Id.*, p. 56:19–22). Mr. LaBrie testified that Fahey first returned his calls on June 12, 2015. (*Id.*, p. 56:23–24). Mr. LaBrie sent an email later the same day, which appears to be the Division’s earliest statement to Fahey that identifies a potential problem. (See Fahey-64; R.T. Jan. 25, 2016, 35:22 to 36:4.)

In rebuttal, the Prosecution Team introduced evidence and testimony explaining that the Division received 9,254 curtailment certification forms in 2014, of which 340, claimed, like Fahey, that because of water from another source, curtailment of their diversion was unnecessary despite the projected lack of water availability under the right for which the 2014 Unavailability Notice was issued. (PT-153, p. 15; see also Fahey-61, pp. 1278–1279 [marking box for “other” alternative source].) For 2015, the Prosecution Team testified that it received 523 certification forms claiming this exception, out of more than 9,300 total forms. (PT-153, p. 15.) At the hearing, Mr. Coats testified that it was “[c]orrect” that “the fact that Mr. Fahey filed his curtailment certification form in 2014 and it took roughly a year to get to him, that was largely due to allocation of staffing resources in response to drought management.” (See R.T., Jan. 26, 2016, p. 31:3–7.) Among other tasks, the Division apparently performed over 1,000 inspections in each year between 2014 and 2015. (*Id.*, p. 30:24–25.) The record indicates that Mr. Fahey never received a response to his Jun. 3, 2014 curtailment certification form claiming a defense to unlawful diversion. (R.T. Jan. 1, 2016, 162:14 to 163:3.) According to Mr. Fahey’s testimony, if the Division had told him that a decision had been made by Board staff that rejected his 2014 claimed defense to unlawful diversion, Mr. Fahey “would have asked immediately for a hearing.” (R.T., Jan. 25, 2016, 169:22 to 170:6.)

7.2 Conclusion Regarding Amount and Suspension of Administrative Civil Liability

In determining the amount of civil liability, the State Water Board has taken into consideration all relevant circumstances, including, but not limited to, the extent of harm caused by the violation,